ORDER NO. AD8806135A4

Service Manual

Amplifier

Stereo Integrated Amplifier

SU-V98

Color

(K) .....Black Type

Area

Color	Area
(K)	(PA) .....Far East PX.
(K)	(PE) .....European Military.

Please use this manual together with the service manual for Model No. SU-Z980, Order No.AD8806102C8.

CHANGES

■ REPLACEMENT PARTS LIST

Notes: * Mentioned in this parts list are only those different from Model SU-Z980(XA), all other parts are the same as for SU-Z980(XA).

* Important safety notice :
Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.

Ref. No.	Change of Part No. SU-Z980(XA) → SU-V98(PA)(PE)		Part Name & Description	Remarks
CABINET AND CHASSIS				
19	SGP7340-1A	**SGP7340-1B**	REAR PANEL	
20	SGYUZ980-KXA	**SGYUV98-KPA**	FRONT PANEL	
PACKING AND ACCESSORIES				
P1	SPG6369	**SPG6371**	PACKING CASE	
A1	SQF13364	**SQF13369**	INSTRUCTION BOOK	
A6 ⚠	SJA185	**SJA168-1**	POWER CORD	

Technics

Matsushita Electric Industrial Co., Ltd.
Central P.O. Box 288, Osaka 530-91, Japan

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Matsushita Electric Industrial Co., Ltd.
World Trade Center Bldg., 4-1, Hamamatsu-cho, 2-chome, Minato-ku, Tokyo 105, Japan

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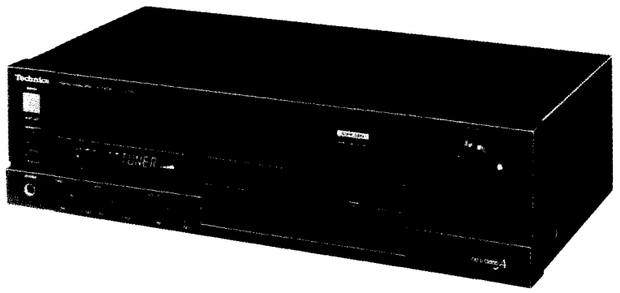

Area

Color	Area
(K)	(EX).....Continental Europe.
(K)	(EH).....Holland.
(K)	(EB).....Belgium.
(K)	(EF).....France.
(K)	(EK).....United Kingdom.
(K)	(Ei).....Italy.
(K)	(XL).....Australia.
(K)	(XA).....Asia,Latin America,Middle Near East,Africa and Oceania.

SPECIFICATIONS (DIN 45 500)

■ AMPLIFIER SECTION

40 Hz ~ 20 kHz continuous power output	
both channels driven	2 x 85 W (8Ω)
DIN power output	2 x 100 W (8Ω)
Total harmonic distortion	
rated power at 40 Hz ~ 20 kHz	0.09% (8Ω)
rated power at 1 kHz	0.05% (8Ω)
half power at 1 kHz	0.03% (8Ω)
Intermodulation distortion	
rated power at 60 Hz:7 kHz = 4 : 1, SMPTE, 8Ω	0.09%
Power bandwidth	
both channels driven,-3dB	10 Hz ~ 20 kHz (8Ω,THD 0.09%)
Residual hum and noise	1 mV
Damping factor	35 (8Ω)
Input sensitivity and impedance	
PHONO	2.5mV/47 kΩ
TUNER, CD, TAPE, VCR 2/TV, VCR 1/EQ	150mV/47 kΩ
PHONO maximum input voltage (1 kHz,RMS)	140 mV
S/N	
rated power (8Ω)	
PHONO	71 dB (IHF,A:78 dB)
TUNER, CD, TAPE, VCR 2/TV, VCR 1/EQ	70 dB (IHF,A:90 dB)
Frequency responce	
PHONO	RIAA standard curve ± 0.8dB (30 Hz ~ 15 kHz)
TUNER, CD, TAPE, VCR 2/TV, VCR 1/EQ	10 Hz ~ 60 kHz (-3 dB)
Tone controls	
BASS	50 Hz, + 10 dB ~ -10 dB
TREBLE	20 kHz, + 10 dB ~ -10 dB
Super bass	80 Hz, + 6 dB
Muting	-20dB
Output voltage	
TAPE, VCR 1/EQ REC OUT	150 mV
Channel blance, CD250Hz ~ 6,300Hz	± 1dB
Headphones output level and impedance	670 mV/330 Ω
Channel separation, CD, 1 kHz	50dB
Load impedance	
MAIN or REMOTE	8 Ω ~ 16 Ω
MAIN and REMOTE	8 Ω ~ 16 Ω

■ GENERAL

Power consumption	510 W
Power supply	
For continental Europe:	AC 50/60 Hz,220 V
For United Kingdom and Australia:	AC 50/60 Hz,240 V
For others:	AC 50/60 Hz, 110 V/127 V/220 V/240 V
Dimensions (W x H x D)	430 x 119 x 255 mm (16-15/16" x 4-11/16" x 10-1/32")
Weight	7.2 kg (15.9 lb.)

Notes:
Total harmonic distortion is measured by the digital spectrum analyzer (H.P. 3045 system).

Technics

Matsushita Electric Industrial Co., Ltd.
Central P.O. Box 288, Osaka 530-91, Japan

SU-Z980

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■ BEFORE REPAIR

(1)Turn off the power supply. Using a 10Ω, 5W resistor connect both ends of power supply capacitors(C703,C704,10000μF) in order to discharge the voltage.

(2)Before turning the power supply on , after completion of repair , slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50Hz/60Hz in NO SIGNAL mode should be shown below with respect to supply voltage 110V/127V/220V/240V.

Power supply voltage	AC110V	AC127V	AC220V	AC240V
Consumed current 50Hz	280 ~ 530mA	250 ~ 500mA	140 ~ 270mA	120 ~ 250mA
Consumed current 60Hz	280 ~ 530mA	250 ~ 500mA	140 ~ 270mA	120 ~ 250mA

■ PROTECTION CIRCUITRY

The protection circuitry of the amplifier may have operated if either of the following conditions is noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted" , or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.

If this occurs, follow the procedure outlined below:

1.Turn off the power.

2.Determine the cause of the problem and correct it.

3.Turn on the power once again.

Note:
When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

■ LOCATION OF CONTROLS

•Front panel

• Power switch (power)

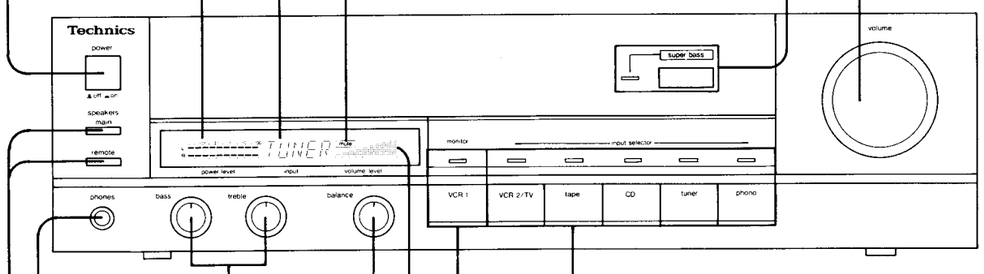
• Peak-power indicators (power level)
These indicators indicate the peak power value of the output level to the speaker systems.

• Input selector/volume level display (input)
This display usually shows the sound source selected by the input selectors; when the volume control is used to adjust the volume level, the volume level is displayed in decibel for about two seconds, after which the display returns again to indication of the sound source.

• Muting indicator (mute)
This indicator will illuminate when the mutting button on the remote-control transmitter is pressed. (Refer to the operating instructions of tuner.) To cancel the muting function without the remote-control transmitter, press both "phono" and "VCR 2/TV" buttons of the input selectors on this unit at the same time, after reducing the volume level to the minimum position.

• Super bass switch/indicator (super bass)
Low frequency sounds are reinforced when this switch is pressed.
The indicator at the left will illuminate.

• Volume control (volume)



• Tone controls (bass/treble)
The bass control is for the low-frequency sound range, and the treble control is for the high-frequency sound range.

• Input selectors/indicators (input selector)
These selectors are used to select the sound source to be heard, such as a disc, radio broadcasts, etc. The corresponding indicator illuminates during operation to indicate the selected sound source. The selected sound source is also showed on the input selector/volume level display.

• Headphones jack (phones)

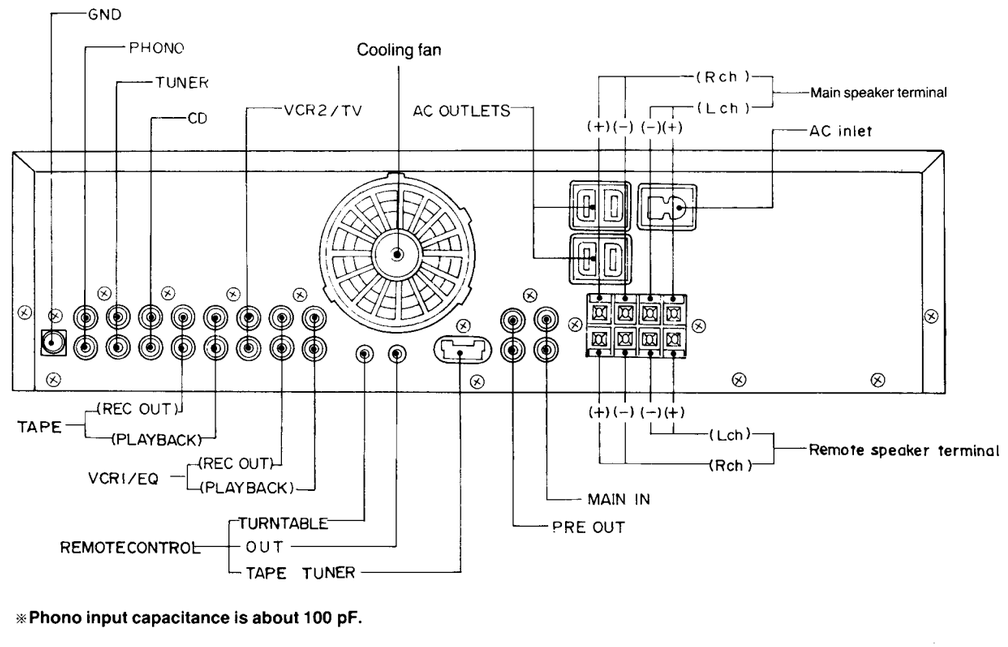
• VCR 1-monitor switch/indicator (VCR 1)
Press this switch so that the indicator above is illuminated when using a graphic equalizer or, playing back or monitoring the sound from a VCR connected to the "VCR 1/EQ" terminals. This selector should be set to the position (indicator off) at all other times.

• Speaker selectors (speakers)
These selectors are used to turn the speaker systems on and off.
Note:
When only one system of speakers is connected, no sound will be heard if both speaker selectors are pressed.

• Volume indicator (volume level)

• Balance control (balance)
This control is used to adjust left/right volume balance.

•Rear panel

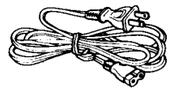


※Phono input capacitance is about 100 pF.

■ ACCESSORIES

- AC power supply cord 1

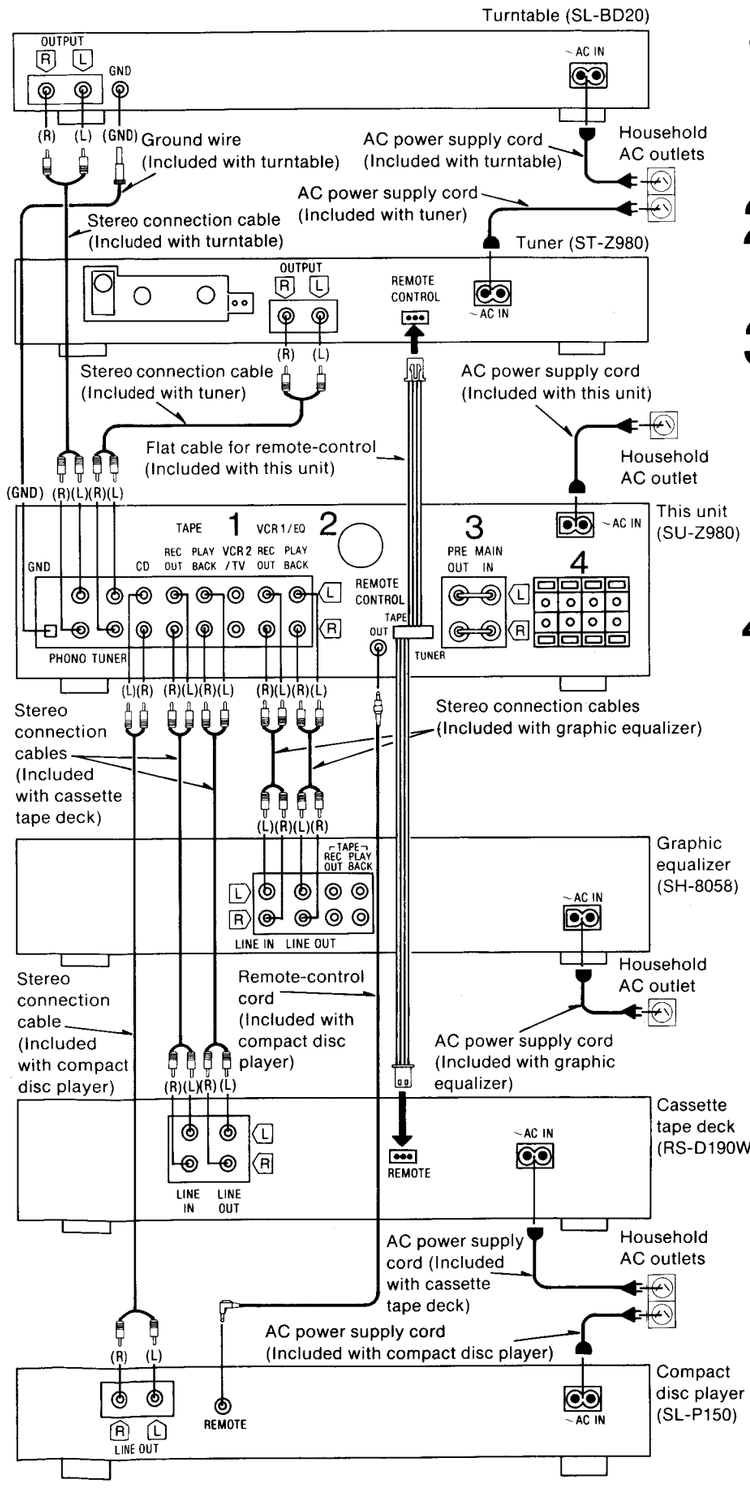
Thick type



(SJA173) ..... For (XL) area only.
(SJA185) ..... For (XA) area only.
(SJA188) ..... For (EK) area only.
(SJA187) ..... For others.

- Flat cable for remote-control 1 (SWKUV98KM1)

■ CONNECTIONS



1 "VCR 2/TV" terminals

For connection to the audio output of a VCR. TV. etc.
(Refer to the operating instructions of the optional equipment.)

2 Cooling fan

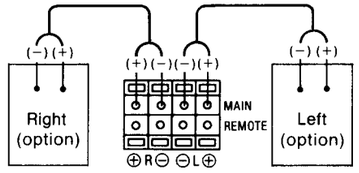
The cooling fan operates only at high output power levels.

3 "PRE-OUT/MAIN-IN" terminals

Do not remove the shorting pins from these terminals unless you plan to use the SU-Z980 as an independent preamplifier or main amplifier. (No sound will be heard if they are removed). To use it in this way, consult the operating instructions for the additional amplifier or preamplifier that you plan to use.

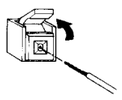
4 "SPEAKERS" terminals

■ Connection of speaker systems



① Twist the core of the speaker wires.

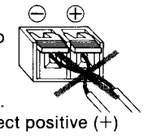
② Lift up the lever, and insert the core until it can no longer be seen.



③ Press down the level, and pull the cord gently to be sure that it is secure.

Notes:

1. To prevent damage to circuitry, never short plus (+) and minus (−) speaker terminals.



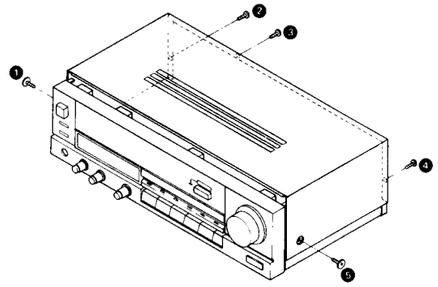
2. Be sure to only connect positive (+) cords to positive (+) terminals, and negative (−) cords to negative (−) terminals.
3. Connections of speaker wires should be made before connecting the AC power supply cords.

■ "REMOTE" terminals

For connection to a second pair of speaker systems.

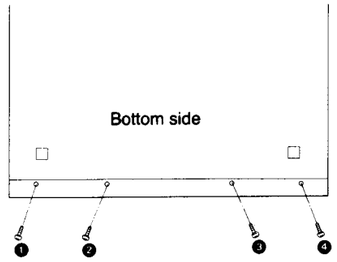
■ DISASSEMBLY INSTRUCTIONS

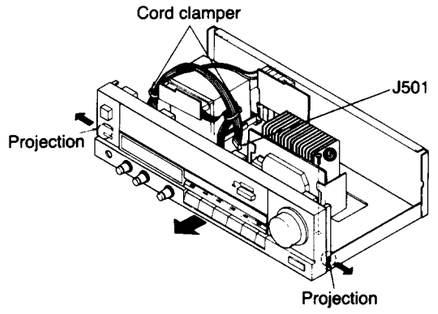
Ref. No. 1	How to remove the cabinet
Procedure 1	●Remove the 5 screws (❶~❺).



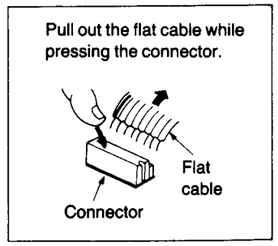
Ref. No. 2	How to remove the front panel
Procedure 1→2	

1. Cut the cord clamper.
2. Remove the flat cable (J501).
3. Remove the 5 screws (❶~❺).
4. Remove from the projection of the bottom chassis.
5. Remove the front panel in the direction of the arrow.



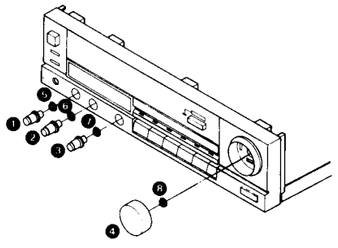


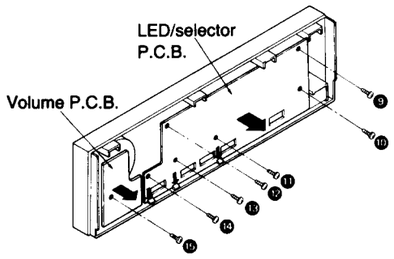
How to remove the flat cable



Ref. No. 3	How to remove the volume and LED/selector P.C.B.
Procedure 1→2→3	

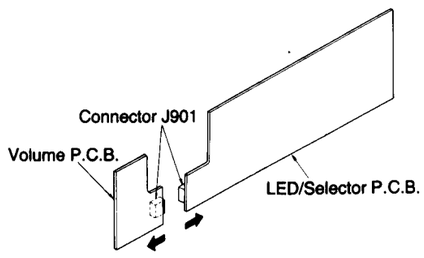
1. Pull out the 4 knobs (❶~❹).
2. Remove the 4 nuts (❺~❽).
3. Remove the 5 screws (❾~⓭).
4. Rotate the Volume Circuit Board and LED/Selector Circuit Board simultaneously in the direction of the arrow.
5. Remove the 1 connector (J901).



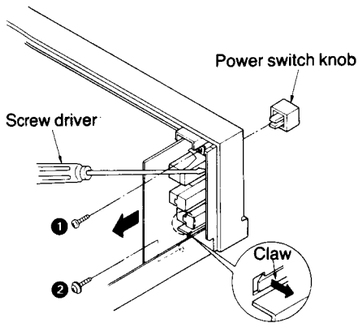


How to remove the knob.

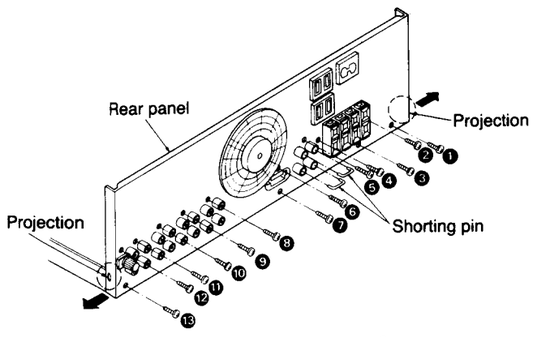
Wind cellophane tape around the knob and put it the direction of the arrow.

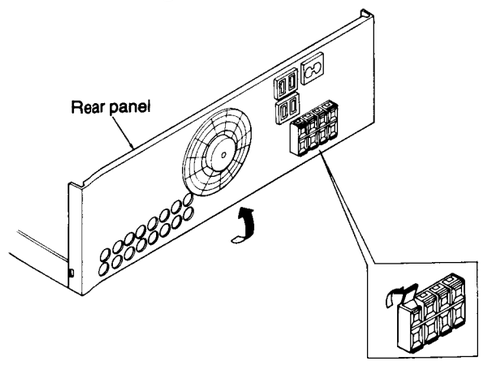


Ref. No. 4	How to remove the power switch P.C.B.
Procedure 1→2→4	1. Remove the power switch knob by pushing it from behind the front panel. 2. Remove the 2 screws (❶, ❷). 3. Release the 1 claw. 4. Remove the power switch P.C.B. in the direction of the arrow.

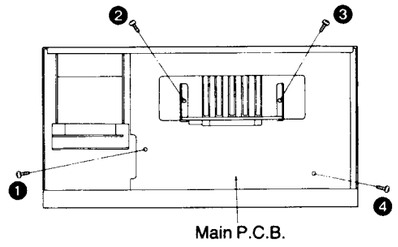


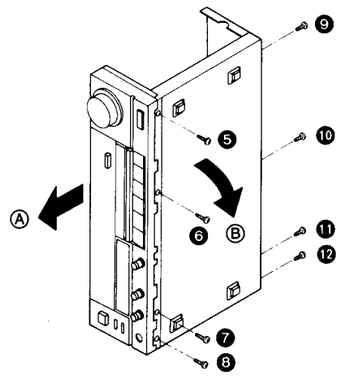
Ref. No. 5	How to remove rear panel
Procedure 1→5	1. Remove the 11 screws (❶~⓭). 2. Remove the shorting pin. 3. Remove from the projection of the bottom chassis. 4. Remove the rear panel in the direction of the arrow.

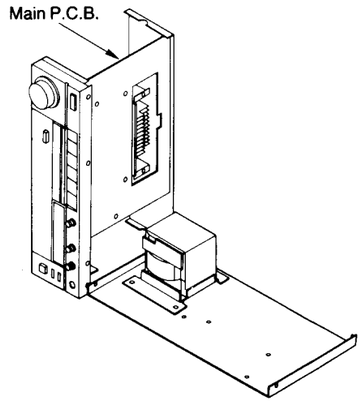




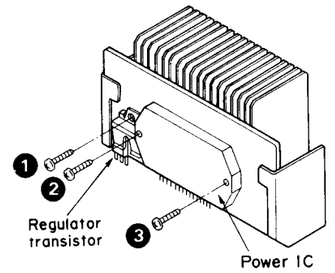
Ref. No. 6	How to check the main P.C.B.
Procedure 1→6	1. Remove the 12 screws (❶~⓬). 2. Remove the front panel in the direction of the arrow Ⓐ. 3. Release the main P.C.B from the projection of the bottom chassis. 4. Remove the bottom chassis in the direction of the arrow Ⓑ. 5. Reinstall the front panel to the main P.C.B.





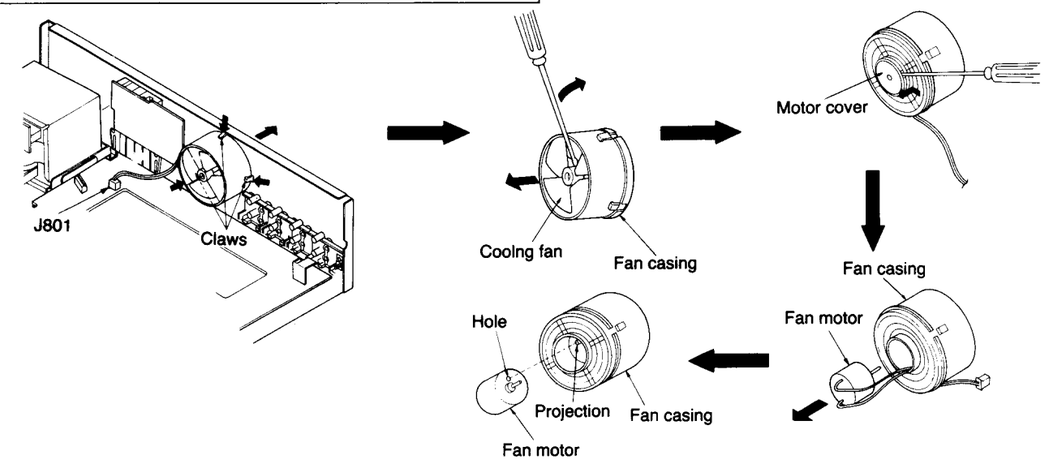


Ref. No. 7	How to remove the power IC and regulator transistor
Procedure 1→5→6→7	1. Unsolder the power IC or regulator transistor. 2. Remove the 3 screws (❶~❸).

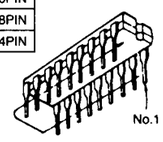
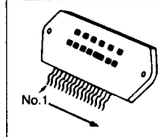
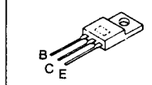
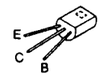
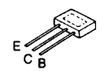
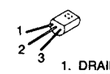
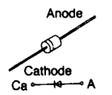
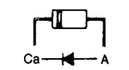
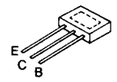
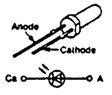
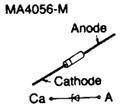


•When mounting the power IC or regulator transistor.
Apply silicone compond (SZZOL15) to the rear side of power IC or regulator transistor.

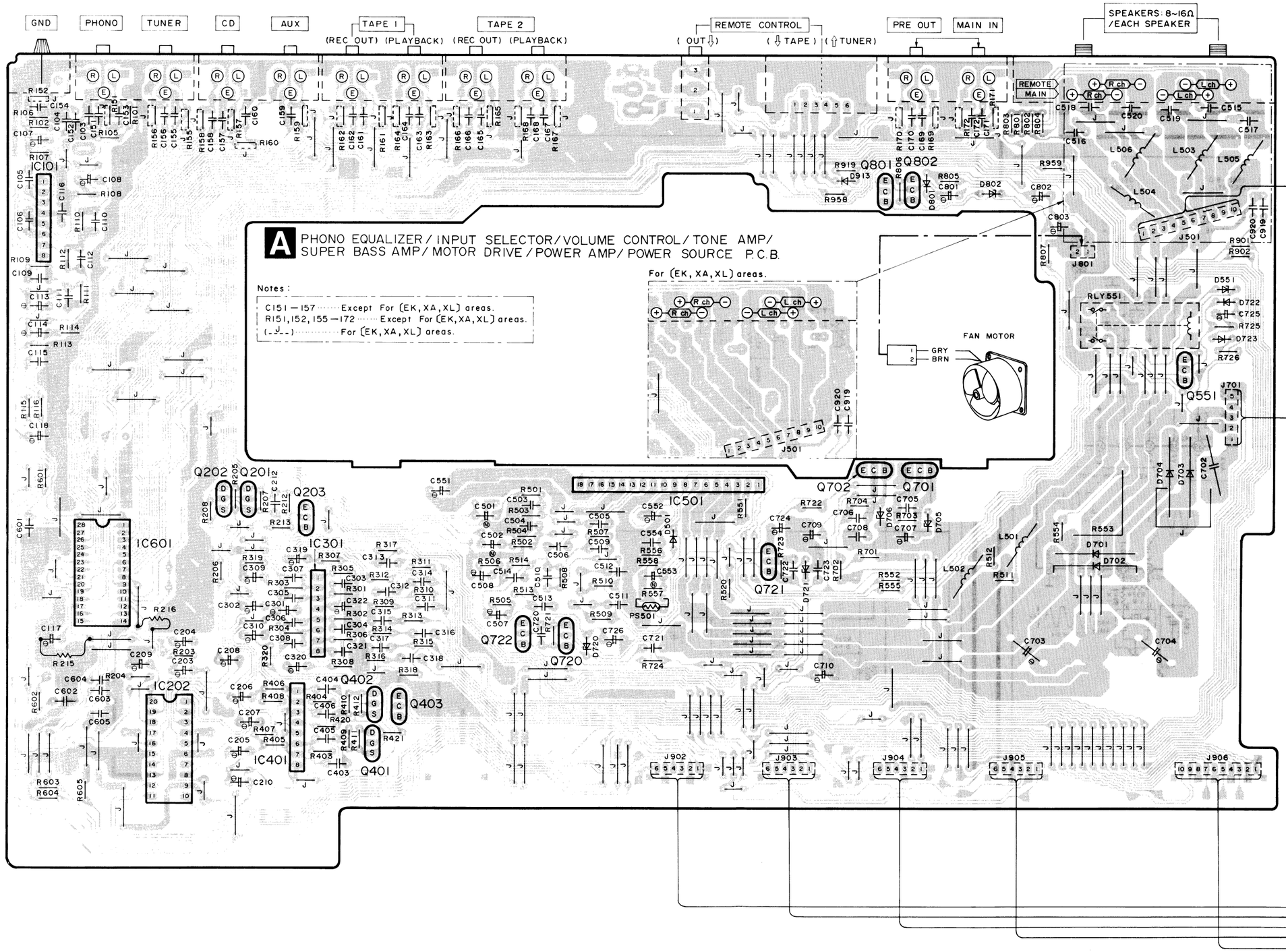
Ref. No. 8	How to remove the fan motor
Procedure 1→8	1. Pull out the 1 connector (J801). 2. Release the 3 claws. 3. Insert a screwdriver at the root of the cooling fan. Force it out of the shaft. 4. Remove the motor cover by used ⊖ screwdriver. 5. Remove the motor from the fan casing. 6. When mounting the motor fan, align the fan casing's projection with the hole of the fan motor.

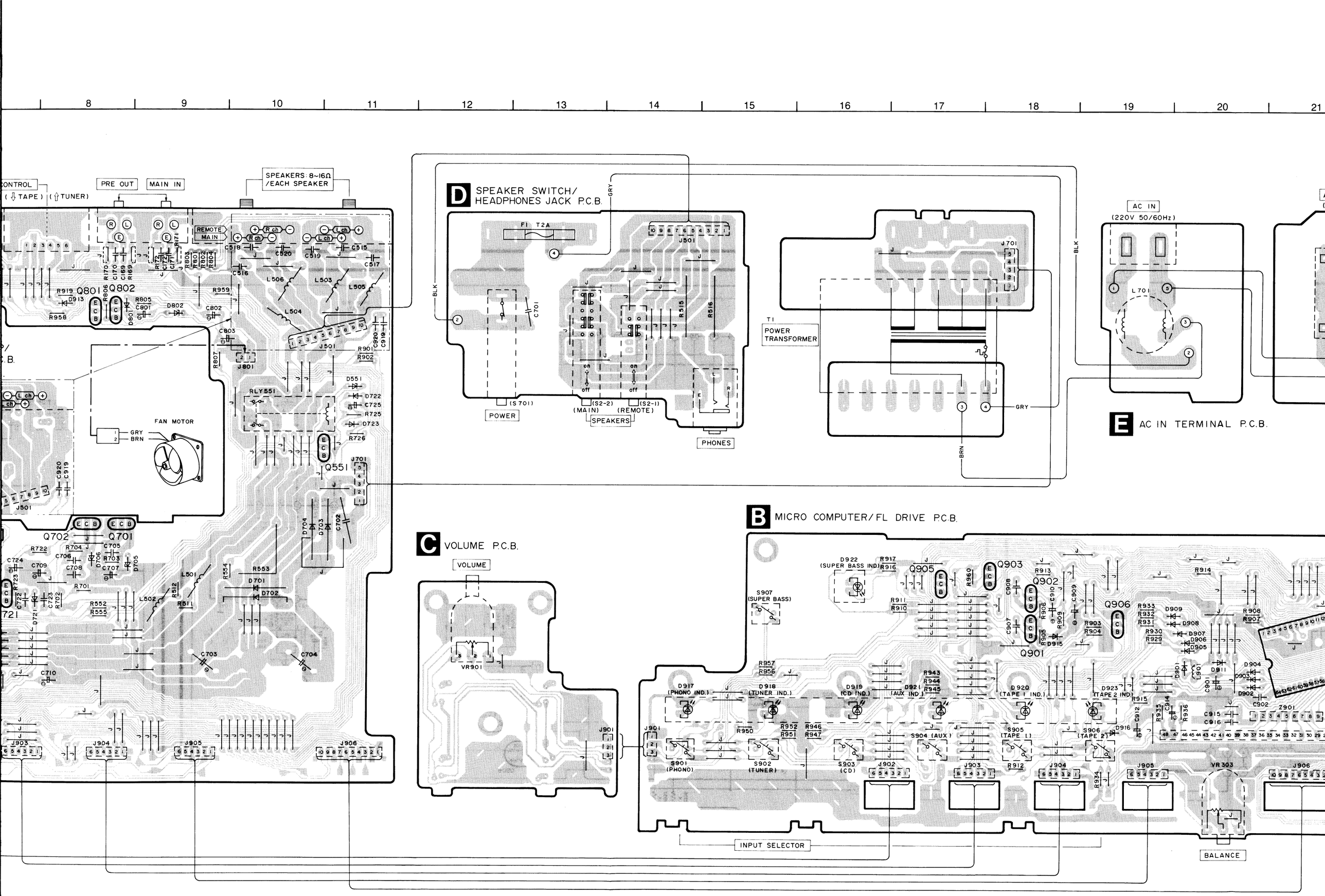


■ TERMINAL GUIDE OF IC's, TRANSISTORS AND DIODES

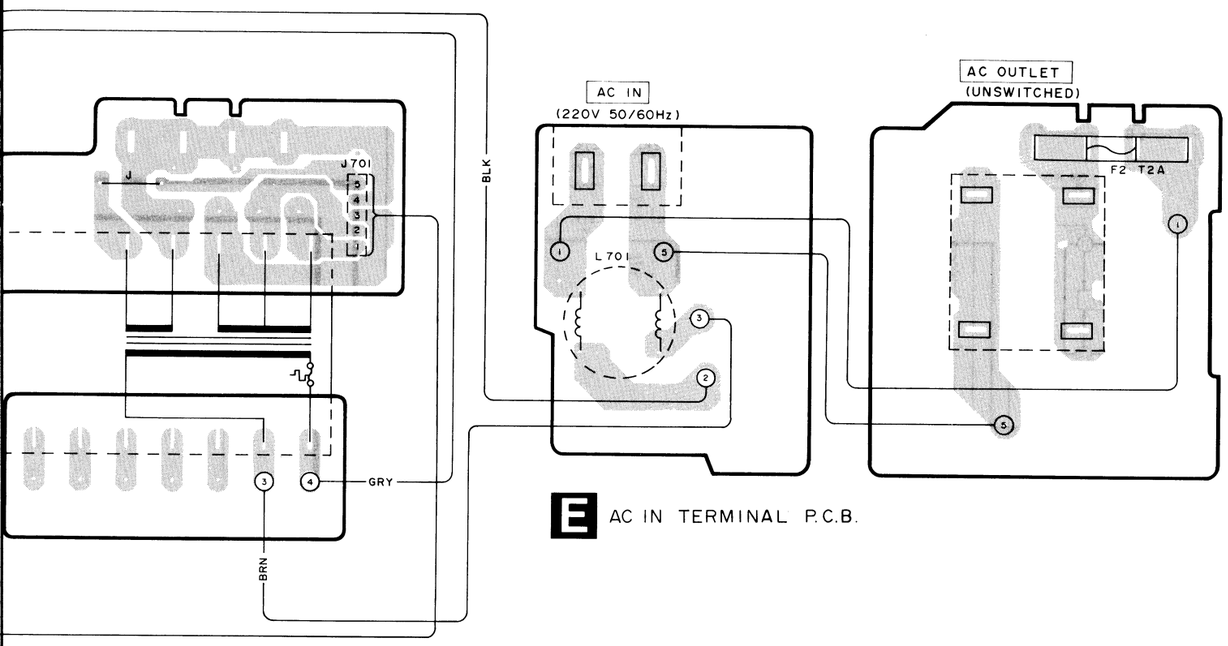
TC9212P 20PIN TC9164N 28PIN M50940-441SP 64PIN 		SV13205 18PIN 	AN6557	2SD1265 2SB941QR 
2SA684, 2SA992 2SC1384 	DTA114ESTP DTC114ESTP 	2SK301 	MA165 MA29WA 	ISR35200 SVDS3V40 
		2SA933 2SC1740 	LN018397PH LN064448P11 	MA4240H, MA4150M MA4330M, MA4062-M MA4056-M 

■ CIRCUIT BOARDS AND WIRING CONNECTION DIAGRAM



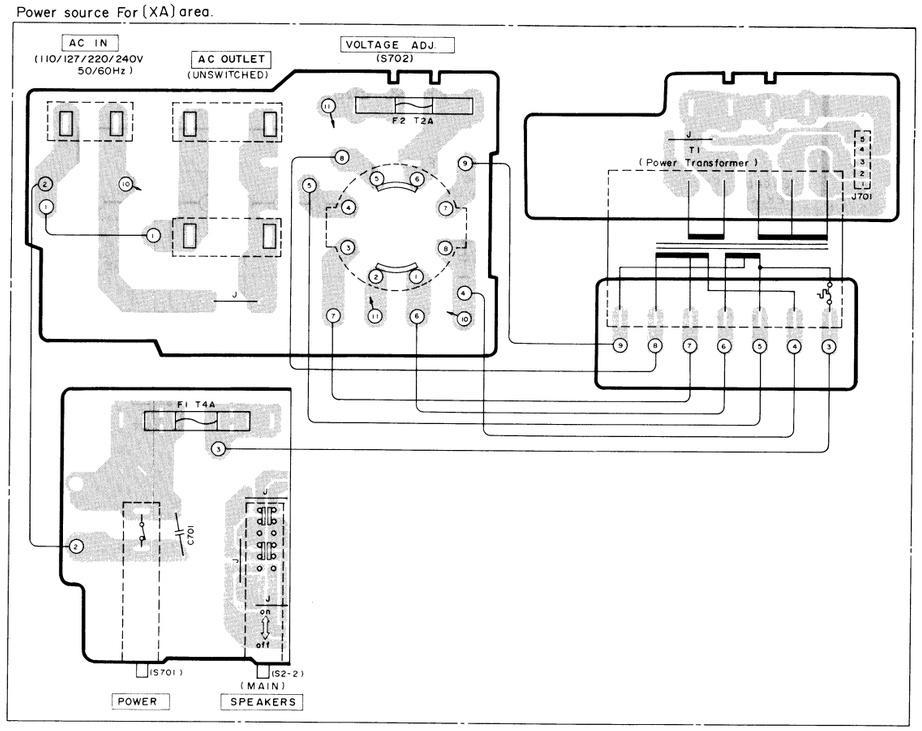

8
9
10
11
12
13
14
15
16
17
18
19
20
21
CONTROL
(⇩ TAPE)
(⇧ TUNER)
PRE OUT
MAIN IN
SPEAKERS: 8~16Ω /EACH SPEAKER
REMOTE
MAIN
Q801
Q802
Q701
Q702
Q551
Q901
J501
J701
J801
J901
J902
J903
J904
J905
J906
RLY551
FAN MOTOR
GRY
BRN
D SPEAKER SWITCH/ HEADPHONES JACK P.C.B.
F1 T2A
(S701)
POWER
(S2-2)
(MAIN)
(S2-1)
(REMOTE)
SPEAKERS
PHONES
BLK
GRY
T1
POWER TRANSFORMER
AC IN
(220V 50/60Hz)
L701
E AC IN TERMINAL P.C.B.
C VOLUME P.C.B.
VOLUME
VR901
B MICRO COMPUTER/FL DRIVE P.C.B.
D922 (SUPER BASS IND.)
S907 (SUPER BASS)
D917 (PHONO IND.)
D918 (TUNER IND.)
D919 (CD IND.)
D921 (AUX IND.)
D920 (TAPE 1 IND.)
D923 (TAPE 2 IND.)
S901 (PHONO)
S902 (TUNER)
S903 (CD)
S904 (AUX)
S905 (TAPE 1)
S906 (TAPE 2)
INPUT SELECTOR
VR303
BALANCE

16 17 18 19 20 21 22 23 24 25 26 27 28 29

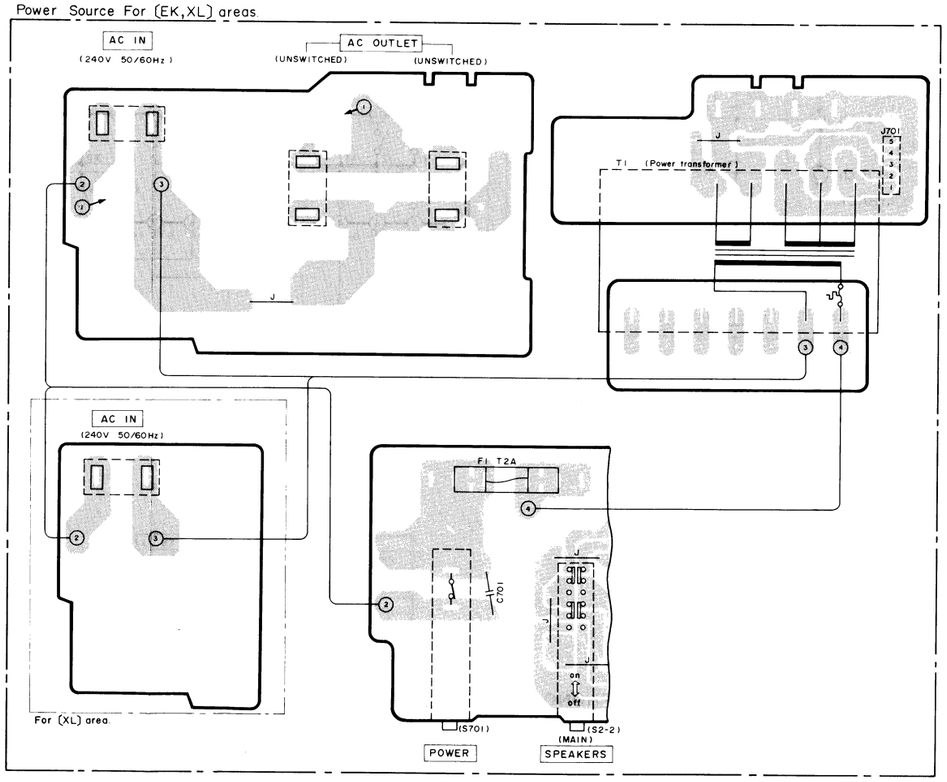


E AC IN TERMINAL P.C.B.

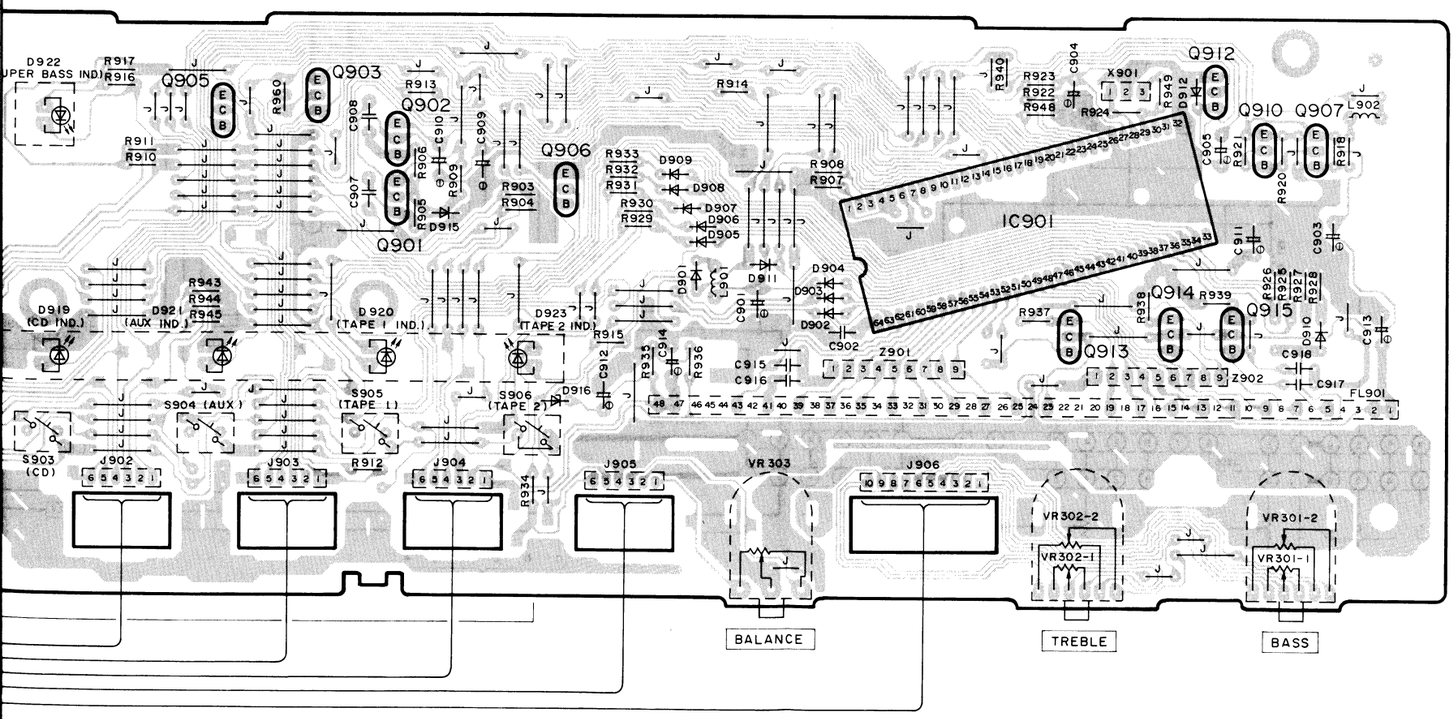
Power source For (XA) area.



Power Source For (EK,XL) areas.

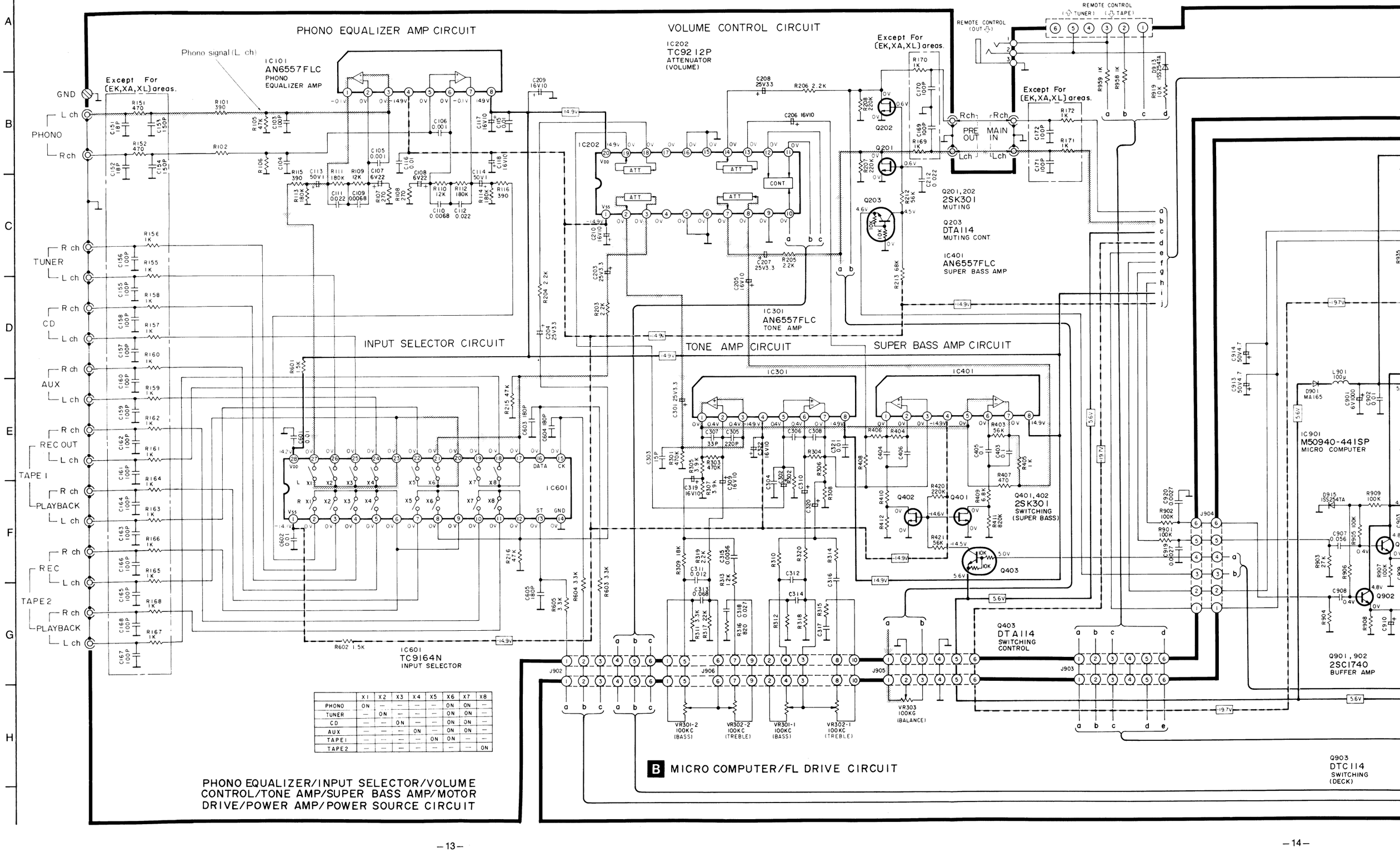


MPUTER/FL DRIVE P.C.B.



SU-Z980 SU-Z980

■ SCHEMATIC DIAGRAM


PHONO EQUALIZER AMP CIRCUIT
VOLUME CONTROL CIRCUIT
INPUT SELECTOR CIRCUIT
TONE AMP CIRCUIT
SUPER BASS AMP CIRCUIT
IC101 AN6557FLC PHONO EQUALIZER AMP
IC202 TC9212P ATTENUATOR (VOLUME)
IC301 AN6557FLC TONE AMP
IC401 AN6557FLC SUPER BASS AMP
IC601 TC9164N INPUT SELECTOR
IC901 M50940-441SP MICRO COMPUTER
Except For (EK,XA,XL) areas.
Phono signal (L ch)
GND
PHONO L ch R ch
TUNER L ch R ch
CD L ch R ch
AUX L ch R ch
REC OUT L ch R ch
TAPE 1 PLAYBACK L ch R ch
REC L ch R ch
TAPE 2 PLAYBACK L ch R ch
REMOTE CONTROL (OUT)
REMOTE CONTROL (TUNER) (TAPE)
PRE OUT Rch Lch
MAIN IN Rch Lch
Q201,202 2SK301 MUTING
Q203 DTA114 MUTING CONT
Q401,402 2SK301 SWITCHING (SUPER BASS)
Q403 DTA114 SWITCHING CONTROL
Q901,902 2SC1740 BUFFER AMP
Q903 DTC114 SWITCHING (DECK)
D901 MA165
D915 1SS254TA
VR301-2 100KC (BASS)
VR302-2 100KC (TREBLE)
VR301-1 100KC (BASS)
VR302-1 100KC (TREBLE)
VR303 100KG (BALANCE)
B MICRO COMPUTER/FL DRIVE CIRCUIT
PHONO EQUALIZER/INPUT SELECTOR/VOLUME CONTROL/TONE AMP/SUPER BASS AMP/MOTOR DRIVE/POWER AMP/POWER SOURCE CIRCUIT

	X1	X2	X3	X4	X5	X6	X7	X8
PHONO	ON	—	—	—	—	ON	ON	—
TUNER	—	ON	—	—	—	ON	ON	—
CD	—	—	ON	—	—	ON	ON	—
AUX	—	—	—	ON	—	ON	ON	—
TAPE1	—	—	—	—	ON	ON	—	—
TAPE2	—	—	—	—	—	—	—	ON

8 9 10 11 12 13 14 15 16 17 18 19 20 21

LUME CONTROL CIRCUIT

TONE AMP CIRCUIT

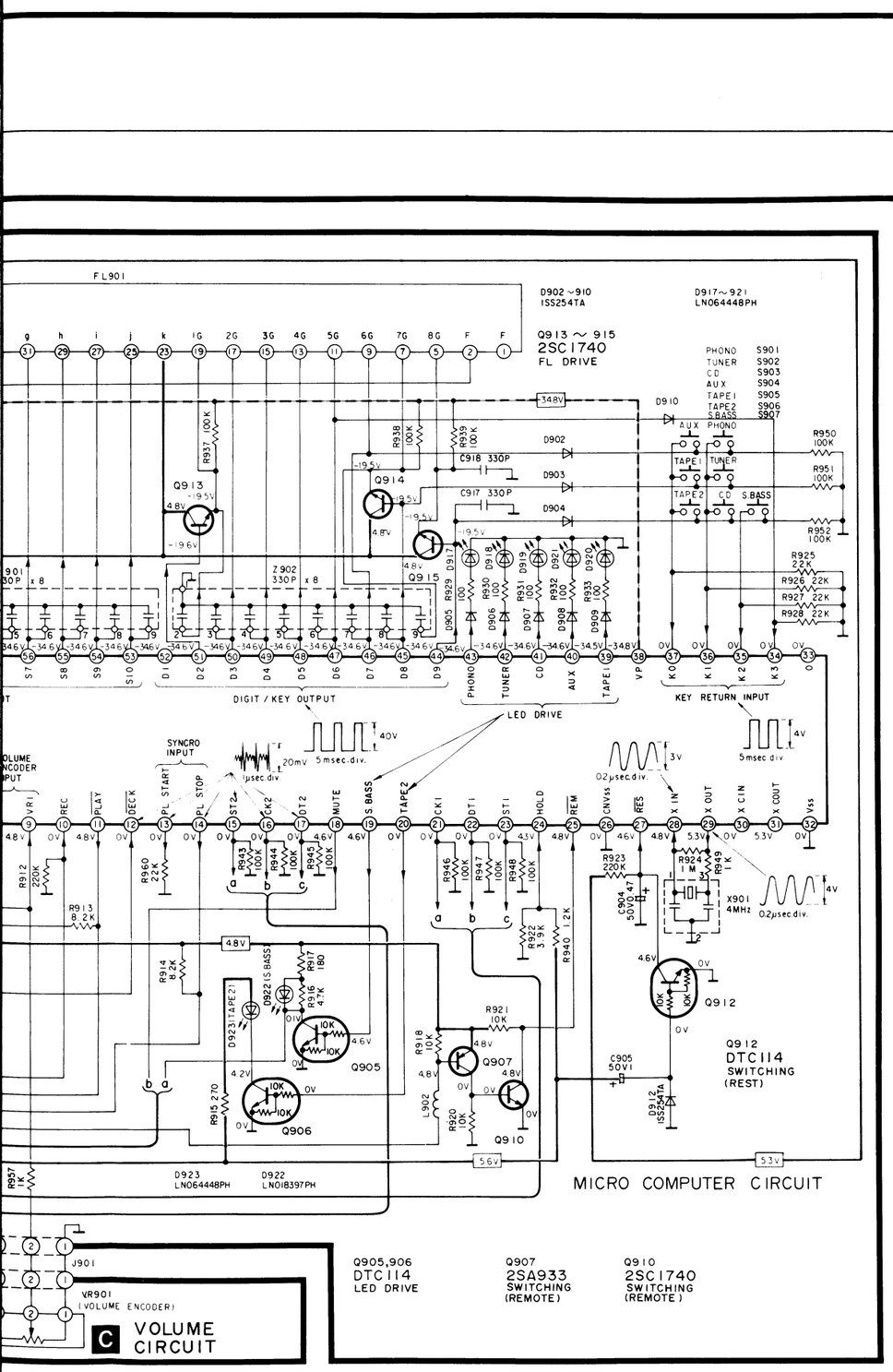
SUPER BASS AMP CIRCUIT

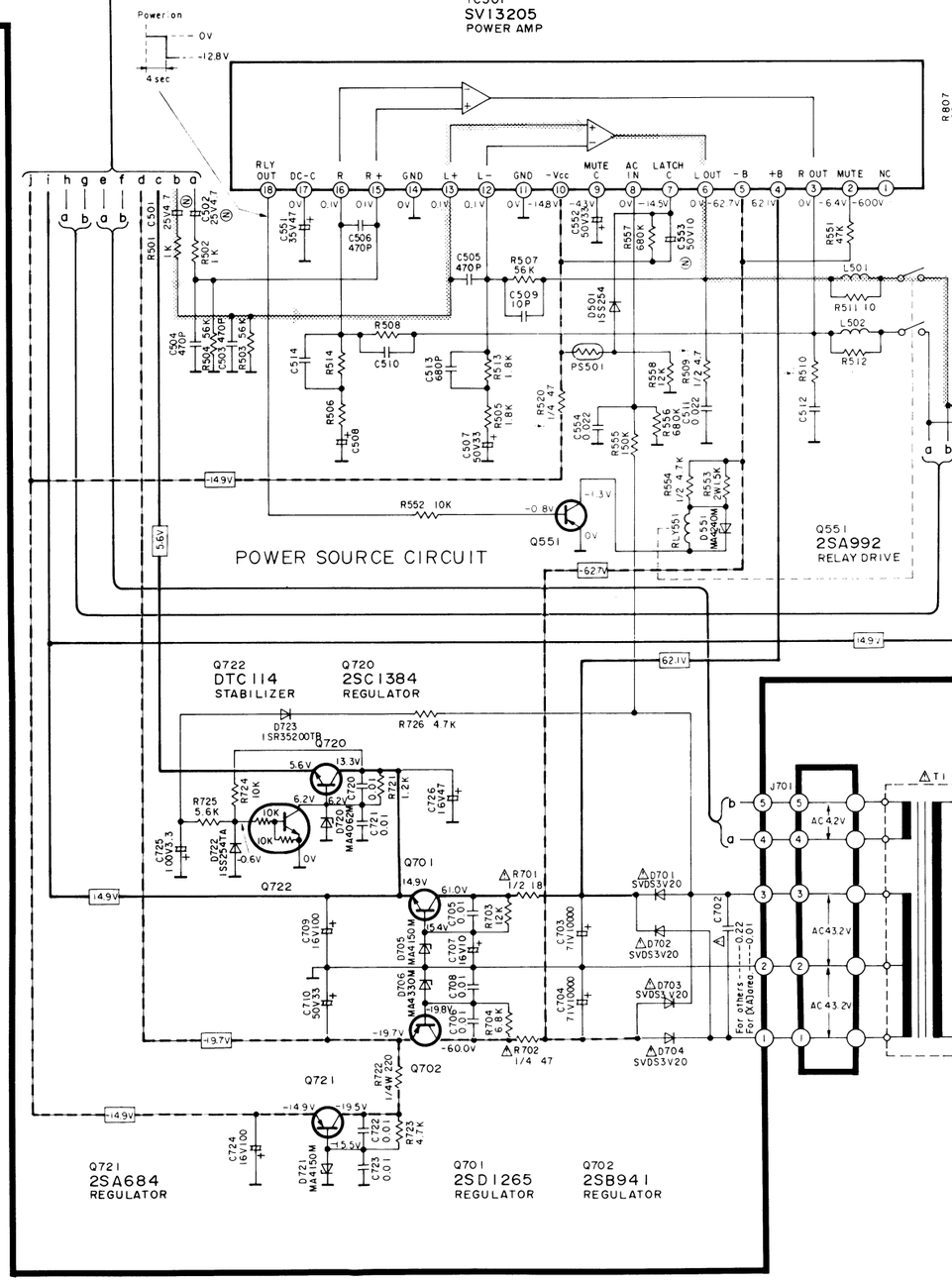
CRO COMPUTER/FL DRIVE CIRCUIT

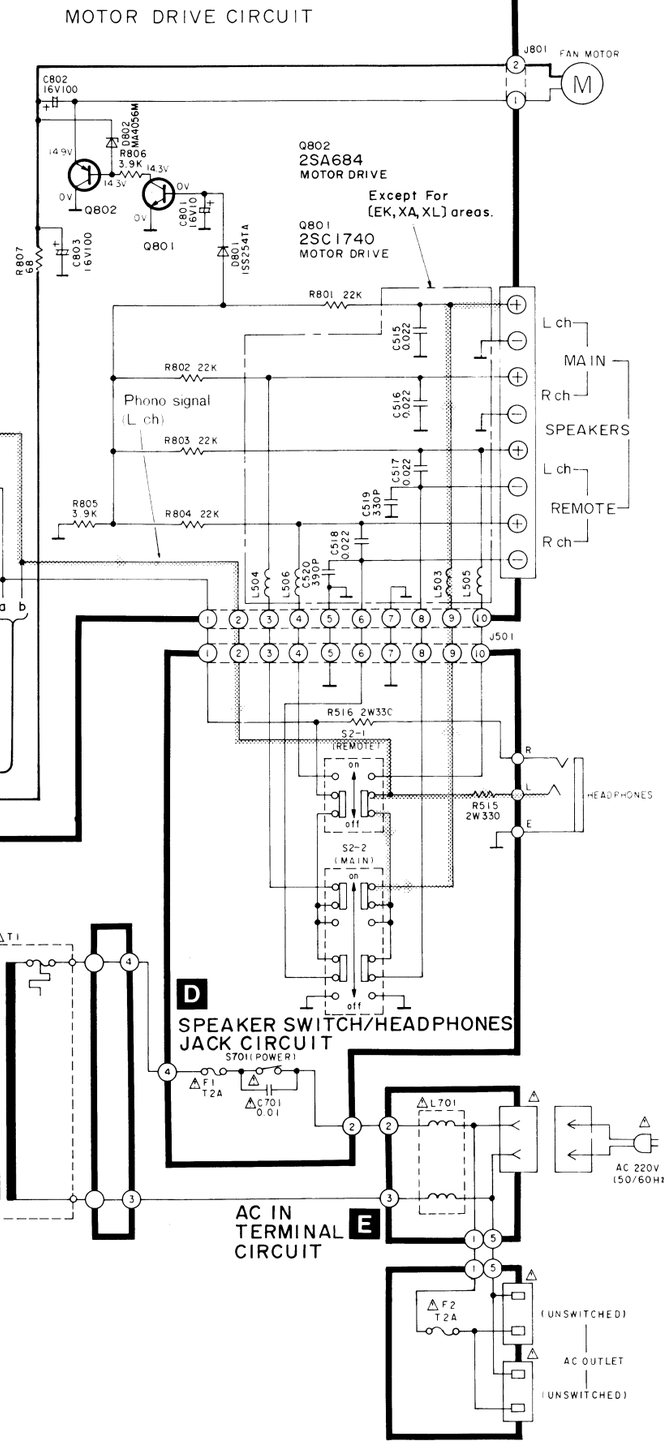
MICRO COMPUTER CIRCUIT

C VOLUME CIRCUIT

16 17 18 19 20 21 22 23 24 25 26 27 28 29

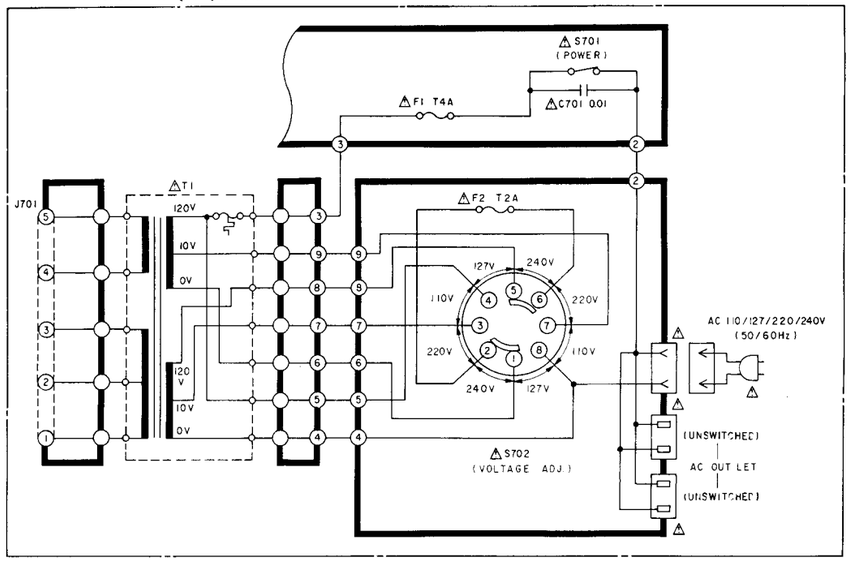




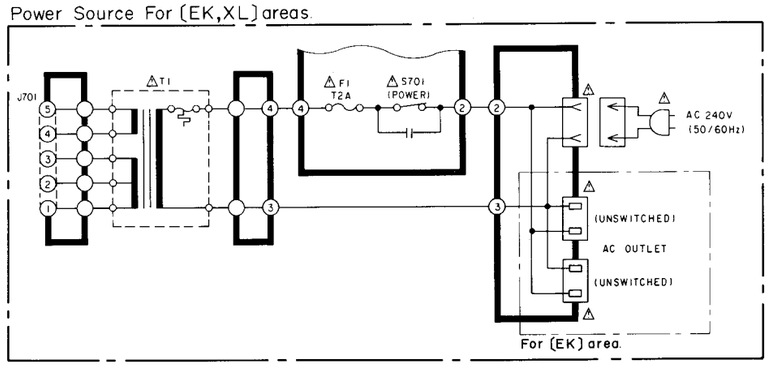

MOTOR DRIVE CIRCUIT
J801 FAN MOTOR
Q802 2SA684 MOTOR DRIVE
Q801 2SC1740 MOTOR DRIVE
Except For (EK, XA, XL) areas.
Phono signal (L ch)
L ch MAIN R ch SPEAKERS L ch REMOTE R ch
HEADPHONES
D SPEAKER SWITCH/HEADPHONES JACK CIRCUIT
AC IN TERMINAL E
(UNSWITCHED) AC OUTLET (UNSWITCHED)
AC 220V (50/60Hz)

31 | 32 | 33 | 34 | 35 | 36 | 37

Power source For(XA)area.



Power Source For (EK,XL) areas.



(This schematic diagram may be modified at any time with the development of new technology.)

Notes:

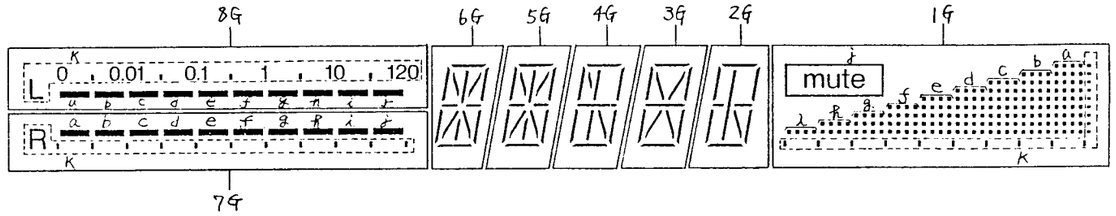
- **•S2-1** : Speaker selector (remote) switch in **"off"** position.
- **•S2-2** : Speaker selector (main) switch in **"on"** position.
- **•S701** : Power switch in **"on"** position.
- **•S702** : Voltage selector switch in **"240 V"** position. (110 V⟷127 V⟷220 V⟷240 V) For (XA) area only.
- **•S901～S905** : Input selector switches. **S901; Phono S902; tuner S903; CD S904; tape S905; VCR2/TV**
- **•S906** : VCR1-monitor switch.
- **•S907** : Super bass switch.
- • : Phono signal (Lch).
- • : Positive voltage lines.
- • : Negative voltage lines.

- •Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
- •Important safety notice: Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

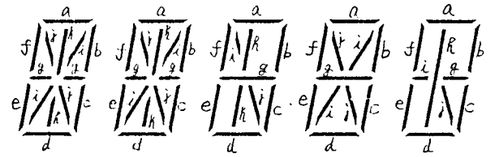
•Caution!
IC and LSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care furing repair.
•Cover the parts boxes made of plastics with aluminum foil.
•Ground the soldering iron.
•Put a conductive mat on the work table.
•Do not touch the legs of IC or LSI with the fingers directly.

■ DESCRIPTION OF FL PANEL

•GRID ASSIGNMENT



•SEGMENT DESIGNATION



•PIN CONNECTION

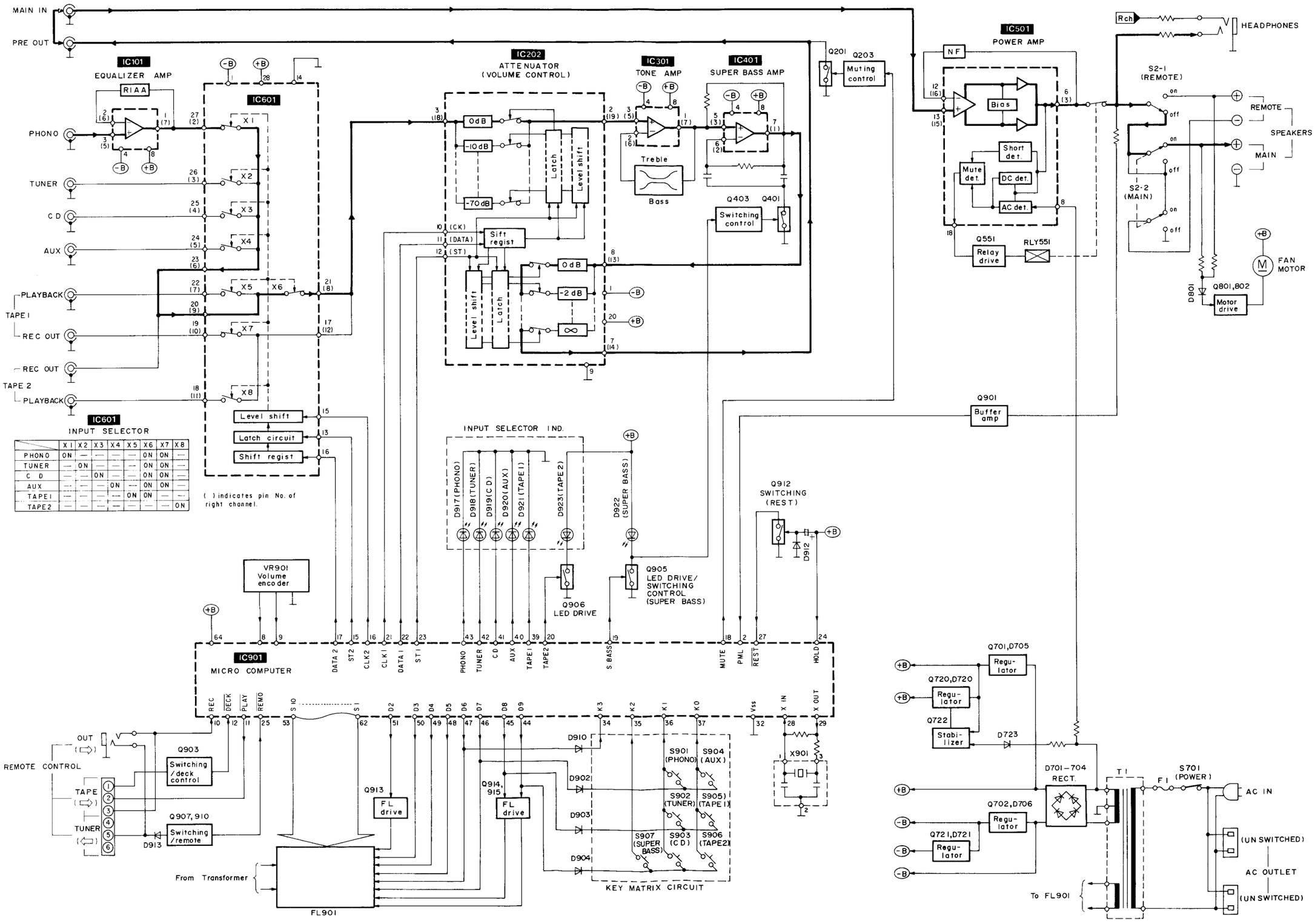
PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
CONNECTION	F1	F1	NP	NP	8G	NP	7G	NP	6G	NP	5G	NP	4G	NP	3G	NP	2G	NP	1G	NP	NP	NP	k	NP	j	NP	i	NP	h

PIN NO.	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
CONNECTION	NP	g	NP	f	NP	e	NP	d	NP	c	NP	b	NP	a	NP	NP	NP	F2	F2

•ANODE CONNECTION

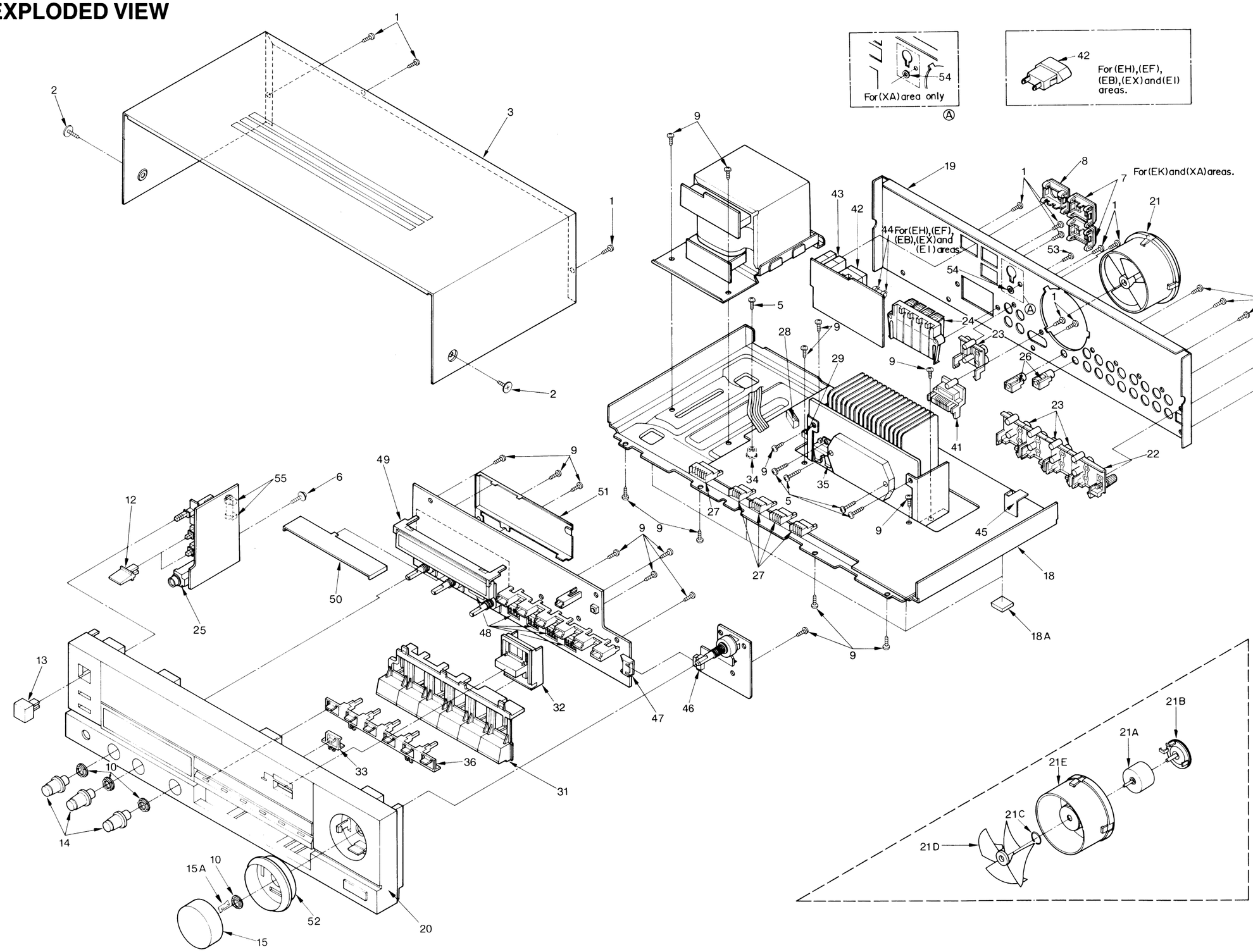
	8 G	7 G	6 G	5 G	4 G	3 G	2 G	1 G
a	▬	▬	a	a	a	a	a	▦
b	▬	▬	b	b	b	b	b	▦
c	▬	▬	c	c	c	c	c	▦
d	▬	▬	d	d	d	d	d	▦
e	▬	▬	e	e	e	e	e	▦
f	▬	▬	f	f	f	f	f	▦
g	▬	▬	g	g	g	g	g	▦
h	▬	▬	h	h	h	-	h	▪▪▪▪
i	▬	▬	i	i	i	i	i	▪▪▪▪
j	▬	▬	j	j	j	j	j	mute
k	L 0～120	R ▮▮▮▮▮▮▮	-	-	-	-	-	▮▮▮▮▮▮▮

■ BLOCK DIAGRAM



	X1	X2	X3	X4	X5	X6	X7	X8
PHONO	ON	—	—	—	—	ON	ON	—
TUNER	—	ON	—	—	—	ON	ON	—
C D	—	—	ON	—	—	ON	ON	—
AUX	—	—	—	ON	—	ON	ON	—
TAPE1	—	—	—	—	ON	ON	—	—
TAPE2	—	—	—	—	—	—	—	ON

■ EXPLODED VIEW



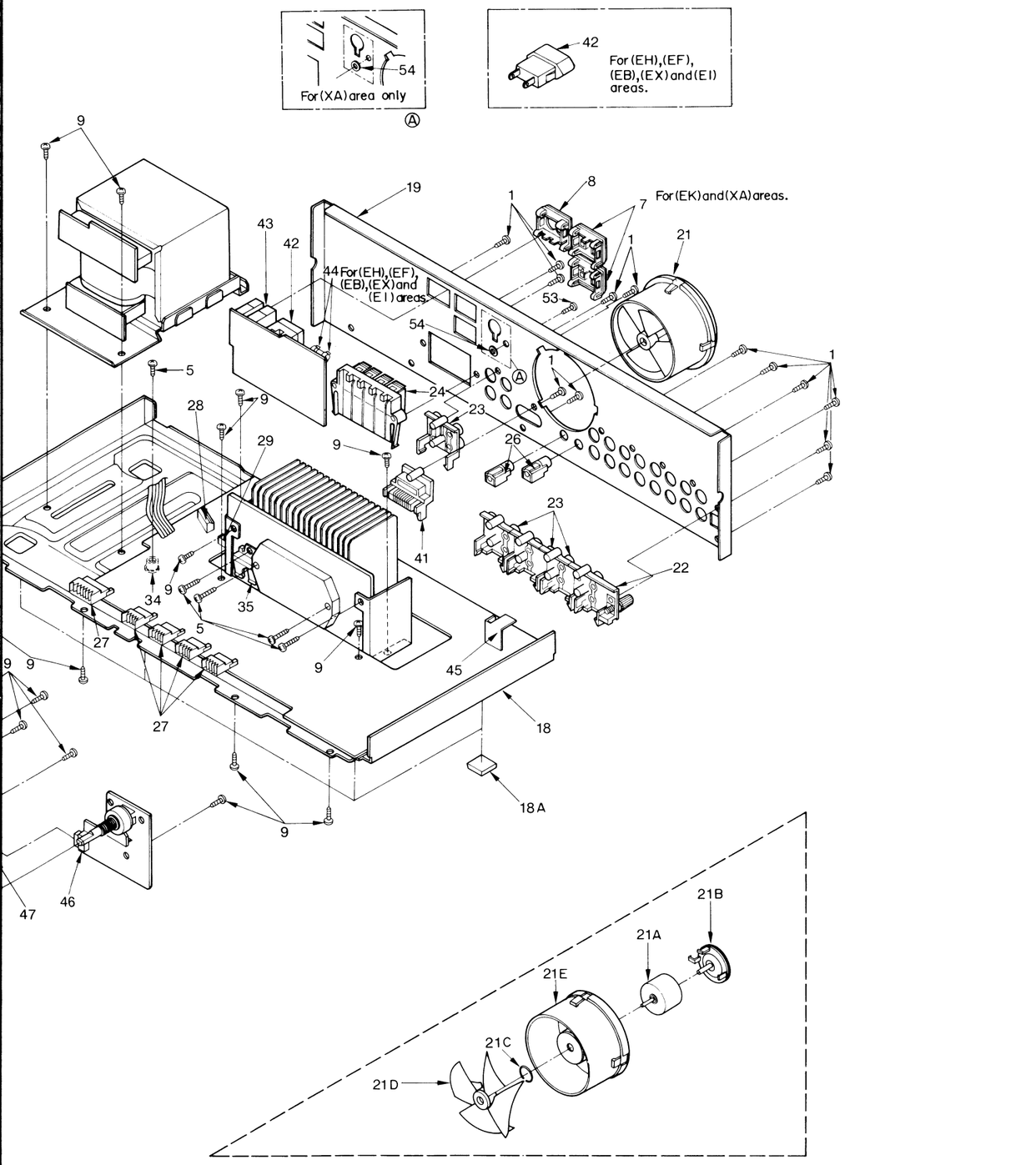
■ RE

Notes : *

*

•CABI

Ref. No
CABINET A
1
2
3
5
6
7
(EK, XA)
8
(EB, EF, EH
(EI, EK, EX
(XA)
8
(XL)
9
10
12
13
14
15
15A
18
18A
19
(EB, EF, EH
(EI)
19
(XA)
19
(XL)
19
(EX)
19
(EK)
20
(EB, EF, EH
(EI, EK, EX
20
(XA, XL)
21
21A
21B
21C
21D
21E
22



■ REPLACEMENT PARTS LIST

Notes : * Important safety notice :
Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
* Bracketed indications in Ref. No. columns specify the area. (Refer to the first page for area.)
Parts without these indications can be used for all areas.

●CABINET PARTS LIST

Ref. No.	Part No.	Description
CABINET AND CHASSIS		
1	XTBS3+8JFZ1	SCREW
2	SNE2129-1	SCREW
3	SKC2200K991	CABINET
5	XTB3+14J	TAPPING SCREW
6	XTWS3+8T	SCREW
7 (EK, XA)	SJS9332A	AC OUTLET COVER
8 (EB, EF, EH) (EI, EK, EX) (XA)	SJS9231A	AC INLET COVER
8 (XL)	SJS9234A	AC INLET COVER
9	XTB3+8JFZ	SCREW
10	SNE4021	NUT
12	SBC315-7	BUTTON, SPEAKER
13	SBC666-5	BUTTON, POWER
14	SBN1221	KNOB, TONE/BALANCE
15	SBN1239	KNOB, M.VOL
15A	SHR9451	SPACER
18	SKUUV98-KM	BOTTOM BOARD
18A	SKL293	FOOT
19 (EB, EF, EH) (EI)	SGPUZ980-KEB	REAR PANEL ASS'Y
19 (XA)	SGP7340-1A	PANEL
19 (XL)	SGP7340-2A	PANEL
19 (EX)	SGP7342A	PANEL
19 (EK)	SGP7343A	PANEL
20 (EB, EF, EH) (EI, EK, EX)	SGYUZ980-KEB	PANEL
20 (XA, XL)	SGYUZ980-KXA	PANEL
21	SYE1128-1	FAN MOTOR ASS'Y
21A	MDN-4RB4MXB	MOTOR
21B	SHE234	HOLDER
21C	SUS271	SPRING
21D	SHE232	FAN
21E	SHE233	MOTOR CASE
22	SJF3067N	TERMINAL
23	SJF3069N	TERMINAL
24	SJF5813	TERMINAL
25	QJA0455YC	JACK
26	SJJ141-1	JACK
27	SJS50680WL	CONNECTOR(6P)
27	SJS51080WL	CONNECTOR(10P)
28	SJT31043-V	CONNECTOR(10P)
29	SJT3213	CONNECTOR(2P)
31 (XA, XL)	SBC1027	BUTTON, INPUT SELECTOR
31 (EB, EF, EH) (EI, EK, EX)	SBC1027B	BUTTON, INPUT SELECTOR
32	SBC1028	BUTTON, S.BASS
33	SGLUV98-KM1	LENS
34	SHE185-1	SPACER
35	SUS894	COIL SPRING
36	SGLUV98-KM2	LENS
41	SJS604	CONNECTOR
42 ⚠ (EB, EF, EH) (EI, EX)	SJS9225	AC OUTLET
42 ⚠ (XA, EK)	SJS9232B	AC OUTLET
43 ⚠ (EB, EF, EH) (EI, EK, EX) (XA)	SJS9231-1B	AC INLET
43 ⚠ (XL)	SJS9234B	AC INLET
44 ⚠ (EB, EF, EH) (EI, EX, XA)	SJT388	FUSE HOLDER
45	SMC6379	SHIELD COVER
46	SJS50382JQH	CONNECTOR(3P)
47	SJT30345JQ	TERMINAL (3P)
48	SJT30647WL	CONNECTOR(6P)
48	SJT31047WL	CONNECTOR(10P)
49	SHR9861	FL HOLDER
50	SMC1291	SHIELD COVER
51	SMC1292	SHIELD COVER
52	SGX7982	ORNAMENT
53 (XA)	XNS3+C10FZ	NUT
54 (XA)	SHW35K150-1	WASHER
55 ⚠	SJT390	FUSE HOLDER

●ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description
INTEGRATED CIRCUITS		
IC101	AN6557FLC	I.C. PHONO EQ AMP
IC202	TC9212P	I.C. ATTENUATOR
IC301	AN6557FLC	I.C. TONE AMP
IC401	AN6557FLC	I.C. S.BASS AMP
IC501	SVI3205	I.C. POWER AMP
IC601	TC9164N	I.C. INPUT SELECTOR
IC901	M50940-441SP	I.C. M.COMPUTER
TRANSISTORS		
Q201	2SK301	TRANSISTOR
Q202	2SK301	TRANSISTOR
Q203	DTA114ESTP	TRANSISTOR
Q401	2SK301	TRANSISTOR
Q402	2SK301	TRANSISTOR
Q403	DTA114ESTP	TRANSISTOR
Q551	2SA992E	TRANSISTOR
Q701	2SD1265-P	TRANSISTOR
Q702	2SB941QR	TRANSISTOR
Q720	2SC1384A-R	TRANSISTOR
Q721	2SA684-RNC	TRANSISTOR
Q722	DTC114ESTP	TRANSISTOR
Q801	2SC1740SQ	TRANSISTOR
Q802	2SA684-RNC	TRANSISTOR
Q901	2SC1740SQ	TRANSISTOR
Q902	2SC1740SQ	TRANSISTOR
Q903	DTC114ESTP	TRANSISTOR
Q904	DTC114ESTP	TRANSISTOR
Q905	DTC114ESTP	TRANSISTOR
Q906	DTC114ESTP	TRANSISTOR
Q907	2SA933SQR	TRANSISTOR
Q910	2SC1740SQ	TRANSISTOR
Q912	DTC114ESTP	TRANSISTOR
Q913	2SC1740SQ	TRANSISTOR
Q914	2SC1740SQ	TRANSISTOR
Q915	2SC1740SQ	TRANSISTOR
DIODES		
D401	MA29WA	DIODE
D501	MA165	DIODE
D551	MA4240H	DIODE
D701 ⚠	SVDS3V40	DIODE
D702 ⚠	SVDS3V40	DIODE
D703 ⚠	SVDS3V40	DIODE
D704 ⚠	SVDS3V40	DIODE
D705	MA4150M	DIODE
D706	MA4330M	DIODE
D720	MA4062-M	DIODE
D721	MA4150M	DIODE
D722	MA165	DIODE
D723 ⚠	SVD1SR35200A	DIODE
D801	MA165	DIODE
D802	MA4056-M	DIODE
D901	MA165	DIODE
D902	MA165	DIODE
D903	MA165	DIODE
D904	MA165	DIODE
D905	MA165	DIODE
D906	MA165	DIODE
D907	MA165	DIODE
D908	MA165	DIODE
D909	MA165	DIODE
D910	MA165	DIODE
D911	MA29WA	DIODE
D912	MA165	DIODE
D913	MA165	DIODE
D915	MA165	DIODE
D916	MA4056-M	DIODE
D922	LN018397PH	LED ASS'Y
D923	LN064448PH	DIODE, LED

Ref. No.	Part No.	Description
VARIABLE RESISTORS		
VR301	EWC2XA025C15	V.R. BASS
VR302	EWC2XA025C15	V.R. TREBLE
VR303	EWHG6AF25G15	V.R. BALANCE
VR901	EVQWQAF2524B	V.R. VOL ENCODER
POSISTORS		
PS1	SRPBD47101	POSISTOR
PS501	SRPBD47101	POSISTOR
COILS AND TRANSFORMERS		
L501	SLQY07G-4A	CHOKE COIL
L502	SLQY07G-4A	CHOKE COIL
L503 {EB, EF, EH} {EI, EX}	SLQY07G-4A	CHOKE COIL
L504 {EB, EF, EH} {EI, EX}	SLQY07G-4A	CHOKE COIL
L505 {EB, EF, EH} {EI, EX}	SLQY07G-4A	CHOKE COIL
L506 {EB, EF, EH} {EI, EX}	SLQY07G-4A	CHOKE COIL
L701 {EB, EF, EH} {EI, EX}	SLQZ650MH49	CHOKE COIL
L901	RLQZP101KT-Y	COIL
L902	RLQZP101KT-Y	COIL
T1 ⚠ {EB, EF, EH} {EI, EX}	SLT5P292	POWER TRANSFORMER
T1 ⚠ {EK, XL}	SLT5P293	POWER TRANSFORMER
T1 ⚠ {XA}	SLT5P294	POWER TRANSFORMER
COMPONENT COMBINATIONS		
Z901	EXFP8331MW	COMBINATION
Z902	EXFP8331MW	COMBINATION
OSCILLATORS		
X901	EF0FC4004A4	CERAMIC FILTER
DISPLAYS		
FL901	SADBG543GK	DISPLAY TUBE
FUSES		
F1 ⚠ {EK}	XBA2C20TB0	FUSE 250V, T2A
F1 ⚠ {EB, EF, EH} {EI, EX, XA} {XL}	XBAS2A2001	FUSE
F2 ⚠ {XA}	XBA2C40TR0	FUSE
SWITCHES		
S2	SSH2136	SW, SPEAKER
S701 ⚠	ESB8249V	SW, POWER
S702 ⚠ {XA}	ESE37263	SW, VOLTAGE SELECTOR
S901	EVQQTG05R	SW, PHONO
S902	EVQQTG05R	SW, TUNER
S903	EVQQTG05R	SW, CD
S904	EVQQTG05R	SW, TAPE
S905	EVQQTG05R	SW, VCR2/TV
S906	EVQQTG05R	SW, VCR1
S907	EVQQTG05R	SW, S BASS
RELAYS		
RL551	SSY134	RELAY

■ RESISTORS AND CAPACITORS

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* Bracketed indications in Ref. No. columns specify the area. (Refer to the first page for area.)
Parts without these indications can be used for all areas.

Numbering System of Resistor

Example:

ERD	25	F	J	102
Type	Wattage (1/4W)	Shape	Tolerance	Value (1KΩ)
ERX	2	AN	J	471
Type	Wattage (2W)	Shape	Tolerance	Value (470Ω)

Numbering System of Capacitor

Example:

ECKD	1H	102	Z	F
Type	Voltage (50V)	Value (0.001μF)	Tolerance	Peculiarity
ECEA	50	M	330	
Type	Voltage (50V)	Pecliarity	Value (33μF)	

● Capacity values are in microfarads (μF) unless specified otherwise, P = Pico-farads (pF) F = Farads (F).
● Resistance values are in ohms (Ω), unless specified otherwise, 1K = 1,000Ω, 1M = 1,000kΩ

Resistor Type		Wattage		Tolerance
ERD	: Carbon	10 : 1/8W	12 : 1/2W	J : ±5%
ERG	: Metal Oxide	14 : 1/4W	25 : 1/4W	F : ±1%
ERQ	: Fuse Type Metal	1A : 1W	18 : 1/8W	G : ±2%
ERX	: Metal Film	S2 : 1/4W	S1 : 1/2W	J : ±5%
ERD L	: Carbon (chip)	2F : 1/4W	50 : 1/2W	K : ±10%
ERO K	: Metal Film (chip)	2A : 2W	3A : 3W	M : ±20%
ERC	: Solid	6G : 1/10W	8G : 1/8W	
ERF	: Incombustible Box-Shaped			
ERM	: Wire-Wound			
RRJ	: Cip Resistor			
ERJ	: Cip Resistor			

Capacitor Type		Voltage		Tolerance
ECE	: Electrolytic	0J : 6.3V	1A : 10V	K : ±10%
ECCD	: Ceramic	1C : 16V	1E : 25V	M : ±20%
ECKD	: Ceramic Capacitor	1H : 50V	1V : 35V	Z : +80 % −20
ECQM	: Poyester	50 : 50V	05 : 50V	J : ±5%
ECQP	: Polypropylene	2H : 500V	2A : 100V	G : ±2%
ECG	: Ceramic	1 : 100V	1J : 63V	F : ±1%
ECEA N	: Non Polar Electrolytic	KC : 400V AC		C : ±0.25pF
QCU	: Ceramic (Chip Type)	KC : 125V AC		D : ±0.5pF
ECUX	: Ceramic (Chip Type)	(UL)		
ECF	: Semiconductor			
EECW	: Liquid electrolyte double layer capacitor			

Ref. No.	Part No.	Value.
RESISTORS(VALUE, WATTAGE)		
R101	ERDS2TJ391	390 1/4
R102	ERDS2TJ391	390 1/4
R105	ERDS2TJ473	47K 1/4
R106	ERDS2TJ473	47K 1/4
R107	ERDS2TJ271	270 1/4
R108	ERDS2TJ271	270 1/4
R109	ERDS2TJ123	12K 1/4
R110	ERDS2TJ123	12K 1/4
R111	ERDS2TJ184	180K 1/4
R112	ERDS2TJ184	180K 1/4
R113	ERDS2TJ184	180K 1/4
R114	ERDS2TJ184	180K 1/4
R115	ERDS2TJ391	390 1/4
R116	ERDS2TJ391	390 1/4
R151 {EB, EF, EH} {EI, EX}	ERDS2TJ471	470 1/4
R152 {EB, EF, EH} {EI, EX}	ERDS2TJ471	470 1/4
R155 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R156 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R157 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R158 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R159 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R160 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R161 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R162 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R163 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R164 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R165 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R166 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R167 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R168 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R169 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R170 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R171 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R172 {EB, EF, EH} {EI, EX}	ERDS2TJ102	1K 1/4
R203	ERDS2TJ222	2.2K 1/4
R204	ERDS2TJ222	2.2K 1/4
R205	ERDS2TJ222	2.2K 1/4
R206	ERDS2TJ222	2.2K 1/4
R207	ERDS2TJ224	220K 1/4
R208	ERDS2TJ224	220K 1/4
R212	ERDS2TJ563	56K 1/4
R213	ERDS2TJ683	68K 1/4
R215	ERDS2TJ473	47K 1/4
R216	ERDS2TJ473	47K 1/4
R301	ERDS2TJ474	470K 1/4
R302	ERDS2TJ474	470K 1/4
R303	ERDS2TJ474	470K 1/4
R304	ERDS2TJ474	470K 1/4
R305	ERDS2TJ392	3.9K 1/4
R306	ERDS2TJ392	3.9K 1/4
R307	ERDS2TJ392	3.9K 1/4
R308	ERDS2TJ392	3.9K 1/4
R309	ERDS2TJ183	18K 1/4
R310	ERDS2TJ183	18K 1/4
R311	ERDS2TJ332	3.3K 1/4
R312	ERDS2TJ332	3.3K 1/4
R313	ERDS2TJ122	1.2K 1/4
R314	ERDS2TJ122	1.2K 1/4
R315	ERDS2TJ821	820 1/4
R316	ERDS2TJ821	820 1/4
R317	ERDS2TJ223	22K 1/4
R318	ERDS2TJ223	22K 1/4
R403	ERDS2TJ563	56K 1/4
R404	ERDS2TJ563	56K 1/4
R405	ERDS2TJ102	1K 1/4
R406	ERDS2TJ102	1K 1/4
R407	ERDS2TJ471	470 1/4
R408	ERDS2TJ471	470 1/4
R409	ERDS2TJ682	6.8K 1/4
R410	ERDS2TJ682	6.8K 1/4
R411	ERDS2TJ824	820K 1/4
R412	ERDS2TJ824	820K 1/4
R420	ERDS2TJ224	220K 1/4
R421	ERDS2TJ563	56K 1/4
R501	ERDS2TJ102	1K 1/4
R502	ERDS2TJ102	1K 1/4
R503	ERDS2TJ563	56K 1/4
R504	ERDS2TJ563	56K 1/4
R505	ERDS2TJ182	1.8K 1/4
R506	ERDS2TJ182	1.8K 1/4
R507	ERDS2TJ563	56K 1/4
R508	ERDS2TJ563	56K 1/4
R509 ⚠	ERDS1FJ100	10 1/2
R510 ⚠	ERDS1FJ100	10 1/2

Ref. No.
R511
R512
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R520 ⚠
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R702 ⚠
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R938
R939
R940

■ RESISTORS AND CAPACITORS

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Numbering System of Resistor

Example:

ERD	25	F	J	102
Type	Wattage (1/4W)	Shape	Tolerance	Value (1KΩ)
ERX	2	AN	J	471
Type	Wattage (2W)	Shape	Tolerance	Value (470Ω)

Numbering System of Capacitor

Example:

ECKD	1H	102	Z	F
Type	Voltage (50V)	Value (0.001μF)	Tolerance	Peculiarity
ECEA	50	M	330	
Type	Voltage (50V)	Pecliarity	Value (33μF)	

- Capacity values are in microfarads (μF) unless specified otherwise, P = Pico-farads (pF) F = Farads (F).
- Resistance values are in ohms (Ω), unless specified otherwise, 1K = 1,000Ω, 1M = 1,000kΩ

Resistor Type		Wattage		Tolerance
ERD	: Carbon	10 : 1/8W	12 : 1/2W	J : ±5%
ERG	: Metal Oxide	14 : 1/4W	25 : 1/4W	F : ±1%
ERQ	: Fuse Type Metal	1A : 1W	18 : 1/8W	G : ±2%
ERX	: Metal Film	S2 : 1/4W	S1 : 1/2W	J : ±5%
ERD L	: Carbon (chip)	2F : 1/4W	50 : 1/2W	K : ±10%
ERO K	: Metal Film (chip)	2A : 2W	3A : 3W	M : ±20%
ERC	: Solid	6G : 1/10W	8G : 1/8W	
ERF	: Incombustible Box-Shaped			
ERM	: Wire-Wound			
RRJ	: Cip Resistor			
ERJ	: Cip Resistor			

Capacitor Type		Voltage		Tolerance
ECE	: Electrolytic	0J : 6.3V	1A : 10V	K : ±10%
ECCD	: Ceramic	1C : 16V	1E : 25V	M : ±20%
ECKD	: Ceramic Capacitor	1H : 50V	1V : 35V	Z : +80 −20 %
ECQM	: Poyester	50 : 50V	05 : 50V	J : ±5%
ECQP	: Polypropylene	2H : 500V	2A : 100V	G : ±2%
ECG	: Ceramic	1 : 100V	1J : 63V	F : ±1%
ECEA N	: Non Polar Electrolytic	KC : 400V AC		C : ±0.25pF
QCU	: Ceramic (Chip Type)	KC : 125V AC (UL)		D : ±0.5pF
ECUX	: Ceramic (Chip Type)			
ECF	: Semiconductor			
EECW	: Liquid electrolyte double layer capacitor			

Ref. No.	Part No.	Value.
RESISTORS(VALUE,WATTAGE)		
R101	ERDS2TJ391	390 1/4
R102	ERDS2TJ391	390 1/4
R105	ERDS2TJ473	47K 1/4
R106	ERDS2TJ473	47K 1/4
R107	ERDS2TJ271	270 1/4
R108	ERDS2TJ271	270 1/4
R109	ERDS2TJ123	12K 1/4
R110	ERDS2TJ123	12K 1/4
R111	ERDS2TJ184	180K 1/4
R112	ERDS2TJ184	180K 1/4
R113	ERDS2TJ184	180K 1/4
R114	ERDS2TJ184	180K 1/4
R115	ERDS2TJ391	390 1/4
R116	ERDS2TJ391	390 1/4
R151	ERDS2TJ471	470 1/4
(EB, EF, EH)		
(EI, EX)		
R152	ERDS2TJ471	470 1/4
(EB, EF, EH)		
(EI, EX)		
R155	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R156	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R157	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R158	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R159	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R160	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R161	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R162	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R163	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R164	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R165	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R166	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R167	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R168	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R169	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R170	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R171	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R172	ERDS2TJ102	1K 1/4
(EB, EF, EH)		
(EI, EX)		
R203	ERDS2TJ222	2.2K 1/4
R204	ERDS2TJ222	2.2K 1/4
R205	ERDS2TJ222	2.2K 1/4
R206	ERDS2TJ222	2.2K 1/4
R207	ERDS2TJ224	220K 1/4
R208	ERDS2TJ224	220K 1/4
R212	ERDS2TJ563	56K 1/4
R213	ERDS2TJ683	68K 1/4
R215	ERDS2TJ473	47K 1/4
R216	ERDS2TJ473	47K 1/4
R301	ERDS2TJ474	470K 1/4
R302	ERDS2TJ474	470K 1/4
R303	ERDS2TJ474	470K 1/4
R304	ERDS2TJ474	470K 1/4
R305	ERDS2TJ392	3.9K 1/4
R306	ERDS2TJ392	3.9K 1/4
R307	ERDS2TJ392	3.9K 1/4
R308	ERDS2TJ392	3.9K 1/4
R309	ERDS2TJ183	18K 1/4
R310	ERDS2TJ183	18K 1/4
R311	ERDS2TJ332	3.3K 1/4
R312	ERDS2TJ332	3.3K 1/4
R313	ERDS2TJ122	1.2K 1/4
R314	ERDS2TJ122	1.2K 1/4
R315	ERDS2TJ821	820 1/4
R316	ERDS2TJ821	820 1/4
R317	ERDS2TJ223	22K 1/4
R318	ERDS2TJ223	22K 1/4
R403	ERDS2TJ563	56K 1/4
R404	ERDS2TJ563	56K 1/4
R405	ERDS2TJ102	1K 1/4
R406	ERDS2TJ102	1K 1/4
R407	ERDS2TJ471	470 1/4
R408	ERDS2TJ471	470 1/4
R409	ERDS2TJ682	6.8K 1/4
R410	ERDS2TJ682	6.8K 1/4
R411	ERDS2TJ824	820K 1/4
R412	ERDS2TJ824	820K 1/4
R420	ERDS2TJ224	220K 1/4
R421	ERDS2TJ563	56K 1/4
R501	ERDS2TJ102	1K 1/4
R502	ERDS2TJ102	1K 1/4
R503	ERDS2TJ563	56K 1/4
R504	ERDS2TJ563	56K 1/4
R505	ERDS2TJ182	1.8K 1/4
R506	ERDS2TJ182	1.8K 1/4
R507	ERDS2TJ563	56K 1/4
R508	ERDS2TJ563	56K 1/4
R509 ⚠	ERDS1FJ100	10 1/2
R510 ⚠	ERDS1FJ100	10 1/2

Ref. No.	Part No.	Value.
R511	ERDS2TJ100	10 1/4
R512	ERDS2TJ100	10 1/4
R513	ERDS2TJ182	1.8K 1/4
R514	ERDS2TJ182	1.8K 1/4
R515	ERG2ANJ331	330 2
R516	ERG2ANJ331	330 2
R520 ⚠	ERD25FJ470	47 1/4
R551	ERDS2TJ473	47K 1/4
R552	ERDS2TJ103	10K 1/4
R553	ERG2ANJ152	1.5K 2
R554	ERDS1FJ472	4.7K 1/2
R555	ERDS2TJ154	150K 1/4
R556	ERDS2TJ684	680K 1/4
R557	ERDS2TJ684	680K 1/4
R558	ERDS2TJ123	12K 1/4
R601	ERDS2TJ152	1.5K 1/4
R602	ERDS2TJ152	1.5K 1/4
R603	ERDS2TJ332	3.3K 1/4
R604	ERDS2TJ332	3.3K 1/4
R605	ERDS2TJ332	3.3K 1/4
R701 ⚠	ERDS1FJ180	18 1/2
R702 ⚠	ERD25FJ470	47 1/4
R703	ERDS2TJ123	12K 1/4
R704	ERDS2TJ682	6.8K 1/4
R721	ERDS2TJ122	1.2K 1/4
R722 ⚠	ERD25FJ221	220 1/4
R723	ERDS2TJ472	4.7K 1/4
R724	ERDS2TJ103	10K 1/4
R725	ERDS2TJ562	5.6K 1/4
R726	ERDS2TJ472	4.7K 1/4
R801	ERDS2TJ223	22K 1/4
R802	ERDS2TJ223	22K 1/4
R803	ERDS2TJ223	22K 1/4
R804	ERDS2TJ223	22K 1/4
R805	ERDS2TJ392	3.9K 1/4
R806	ERDS2TJ392	3.9K 1/4
R807	ERDS2TJ680	68 1/4
R901	ERDS2TJ104	100K 1/4
R902	ERDS2TJ104	100K 1/4
R903	ERDS2TJ273	27K 1/4
R904	ERDS2TJ273	27K 1/4
R905	ERDS2TJ104	100K 1/4
R906	ERDS2TJ104	100K 1/4
R907	ERDS2TJ104	100K 1/4
R908	ERDS2TJ104	100K 1/4
R909	ERDS2TJ104	100K 1/4
R910	ERDS2TJ153	15K 1/4
R911	ERDS2TJ153	15K 1/4
R912	ERDS2TJ224	220K 1/4
R913	ERDS2TJ822	8.2K 1/4
R914	ERDS2TJ822	8.2K 1/4
R915	ERDS2TJ271	270 1/4
R916	ERDS2TJ472	4.7K 1/4
R917	ERDS2TJ181	180 1/4
R918	ERDS2TJ103	10K 1/4
R919	ERDS2TJ103	10K 1/4
R920	ERDS2TJ103	10K 1/4
R921	ERDS2TJ103	10K 1/4
R922	ERDS2TJ392	3.9K 1/4
R923	ERDS2TJ224	220K 1/4
R924	ERDS2TJ105	1M 1/4
R925	ERDS2TJ223	22K 1/4
R926	ERDS2TJ223	22K 1/4
R927	ERDS2TJ223	22K 1/4
R928	ERDS2TJ223	22K 1/4
R929	ERDS2TJ101	100 1/4
R930	ERDS2TJ101	100 1/4
R931	ERDS2TJ101	100 1/4
R932	ERDS2TJ101	100 1/4
R933	ERDS2TJ101	100 1/4
R934	ERDS2TJ330	33 1/4
R935	ERDS2TJ101	100 1/4
R936	ERDS2TJ101	100 1/4
R937	ERDS2TJ104	100K 1/4
R938	ERDS2TJ104	100K 1/4
R939	ERDS2TJ104	100K 1/4
R940	ERDS2TJ122	1.2K 1/4
R943	ERDS2TJ104	100K 1/4
R944	ERDS2TJ104	100K 1/4
R945	ERDS2TJ104	100K 1/4
R946	ERDS2TJ104	100K 1/4
R947	ERDS2TJ104	100K 1/4
R948	ERDS2TJ104	100K 1/4
R949	ERDS2TJ102	1K 1/4
R950	ERDS2TJ104	100K 1/4
R951	ERDS2TJ104	100K 1/4
R952	ERDS2TJ104	100K 1/4
R956	ERDS2TJ102	1K 1/4
R957	ERDS2TJ102	1K 1/4
R958	ERDS2TJ102	1K 1/4
R959	ERDS2TJ102	1K 1/4
R960	ERD25FJ223	22K 1/4
CAPACITORS(VALUE,VOLTAGE)		
C103	RCBC1H101KBY	100P 50
C104	RCBC1H101KBY	100P 50
C105	ECKD1H102KB	0.001 50
C106	ECKD1H102KB	0.001 50
C107	ECEA0JK220	22 6.3
C108	ECEA0JK220	22 6.3
C109	ECFTD682KXL	0.0068 25
C110	ECFTD682KXL	0.0068 25
C111	ECFTD223KXL	0.022 25
C112	ECFTD223KXL	0.022 25
C113	ECEA1HK010	1 50
C114	ECEA1HK010	1 50
C115	ECKD1H103PF	0.01 50
C116	ECKD1H103PF	0.01 50
C117	ECEA1CKS100	10 16
C118	ECEA1CKS100	10 16
C151	RCBS1H180KBY	18P 50
(EB, EF, EH)		
(EI, EX)		
C152	RCBS1H180KBY	18P 50
(EB, EF, EH)		
(EI, EX)		
C153	RCBC1H151KBY	150P 50
(EB, EF, EH)		
(EI, EX)		
C154	RCBC1H151KBY	150P 50
(EB, EF, EH)		
(EI, EX)		
C155	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C156	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C157	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C158	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C159	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C160	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C161	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C162	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C163	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C164	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C165	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C166	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C167	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C168	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C169	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C170	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C171	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C172	RCBS1H101KB	100P 50
(EB, EF, EH)		
(EI, EX)		
C203	ECEA1EK3R3B	3.3 25
C204	ECEA1EK3R3B	3.3 25
C205	ECEA1CKS100	10 16
C206	ECEA1CKS100	10 16
C207	ECEA1EK3R3B	3.3 25
C208	ECEA1EK3R3B	3.3 25
C209	ECEA1CKS100	10 16
C210	ECEA1CKS100	10 16
C212	ECFTD223KXL	0.022 25
C301	ECEA1EK3R3B	3.3 25
C302	ECEA1EK3R3B	3.3 25
C303	RCBC1H150JLY	15P 50
C304	RCBC1H150JLY	15P 50
C305	RCBS1H221KBY	220P 50
C306	RCBS1H221KBY	220P 50
C307	RCBS1H330JLY	33P 50
C308	RCBS1H330JLY	33P 50
C309	ECEA1CKS100	10 16
C310	ECEA1CKS100	10 16
C311	ECFTD123KXL	0.012 25
C312	ECFTD123KXL	0.012 25
C313	ECFTD683KXL	0.068 25
C314	ECFTD683KXL	0.068 25
C315	ECFTD562KXL	0.0056 25
C316	ECFTD562KXL	0.0056 25
C317	ECFTD273KXL	0.027 25
C318	ECFTD273KXL	0.027 25
C319	ECEA1CKS100	10 16
C320	ECEA1CKS100	10 16
C321	ECKD1H103PF	0.01 50
C322	ECEA1CKS100	10 16
C403	ECFTD104KXL	0.1 25
C404	ECFTD104KXL	0.1 25
C405	ECFTD104KXL	0.1 25
C406	ECFTD104KXL	0.1 25
C501	ECEA1EN4R7S	4.7 25
C502	ECEA1EN4R7S	4.7 25
C503	ECKD1H471KB	470P 50
C504	ECKD1H471KB	470P 50
C505	ECKD1H471KB	470P 50
C506	ECKD1H471KB	470P 50
C507	ECEA1HS330	33 50
C508	ECEA1HS330	33 50
C509	ECCD1H100KC	10P 50
C510	ECCD1H100KC	10P 50
C511	ECFTD223KXL	0.022 25
C512	ECFTD223KXL	0.022 25
C513	ECKD1H681K	680P 50
C514	ECKD1H681K	680P 50
C515	ECKD1H223PF	0.022 50
(EB, EF, EH)		
(EI, EX)		
C516	ECKD1H223PF	0.022 50
(EB, EF, EH)		
(EI, EX)		

Ref. No.	Part No.	Value.	Ref. No.	Part No.	Value.	Ref. No.	Part No.	Value.
C517 (EB, EF, EH) (EI, EX)	ECKD1H223PF	0.022 50	C701 ⚠	ECKWNS103ZVS	0.01	C801	ECEA1CKS100	10 16
C518 (EB, EF, EH) (EI, EX)	ECKD1H223PF	0.022 50	C702 ⚠ (XA)	ECKD2H103PE	0.01 500	C802	ECEA1CU101	100 16
C519 (EB, EF, EH) (EI, EX)	ECKD1H331KB	330P 50	C702 (EB, EX, EF) (EH, EI, EK)	ECQP1224JZW	0.22 100	C803	ECEA1CU101	100 16
C520 (EB, EF, EH) (EI, EX)	ECKD1H331KB	330P 50	(XL)			C901	ECEA0JS102	1000 6.3
C551	ECEA1VU470	47 35	C703	ECES71V103VN	10000 71	C902	ECKD1H103PF	0.01 50
C552	ECEA1HS330	33 50	C704	ECES71V103VN	10000 71	C903	ECEA0JU471	470 6.3
C553	ECEA1HN100S	10 50	C705	ECKD1H103PF	0.01 50	C904	ECEA1HKR47	0.47 50
C554 (EK, XA, XL)	ECKD1H223PF	0.022 50	C706	ECKD1H103PF	0.01 50	C905	ECEA1HK010	1 50
C601	ECKD1H103PF	0.01 50	C707	ECEA1CKS100	10 16	C907	ECFTD563KXL	0.056 25
C602	ECKD1H103PF	0.01 50	C708	ECKD1H103PF	0.01 50	C908	ECFTD563KXL	0.056 25
C603	RCBS1H181KB	180P 50	C709	ECEA1CU101	100 16	C909	ECEA1HK2R2B	2.2 50
C604	RCBS1H181KB	180P 50	C710	ECEA1HS330	33 50	C910	ECEA1HK2R2B	2.2 50
C605	RCBS1H181KB	180P 50	C720	ECKD1H103PF	0.01 50	C911	ECEA1VU330	33 35
			C721	ECKD1H103PF	0.01 50	C912	ECEA1VU330	33 35
			C722	ECKD1H103PF	0.01 50	C913	ECEA1HK4R7	4.7 50
			C723	ECKD1H103PF	0.01 50	C914	ECEA1HK4R7	4.7 50
			C724	ECEA1CU101	100 16	C915	RCBS1H331KBY	330P 50
			C725	ECEA2AU3R3B	3.3 100	C916	RCBS1H331KBY	330P 50
			C726	ECEA1CU470	47 16	C917	RCBS1H331KBY	330P 50
						C918	RCBS1H331KBY	330P 50
						C919	RCBS1C272MXY	0.0027 16
						C920	RCBS1C272MXY	0.0027 16

●PACKING PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
PACKING MATERIAL			A1 (EI)	SQF13363	INSTRUCTION BOOK
P1 (EB, EH, EI) (EK, XA, XL) (EX)	SPG6369	PACKING CASE	A1 (XA)	SQF13364	INSTRUCTION BOOK
P1 (EF)	SPG6370	PACKING CASE	A1 (XL)	SQF13365	INSTRUCTION BOOK
P2	SPS5246	PAD	A2	SWKUV98KM1	FLAT CABLE
P3	SPS5185	PAD	A6 ⚠ (XL)	SJA173	POWER CORD
P3	SPS5247	PAD	A6 ⚠ (XA)	SJA185	POWER CORD
P4	SPP723	PROTECTION COVER	A6 (EB, EF, EH) (EI, EX)	SJA187	POWER CORD
ACCESSORIES			A6 ⚠ (EK)	SJA188	POWER CORD
A1 (EH, EX)	SQF13360	INSTRUCTION BOOK	A7 ⚠ (XA)	RJP120ZBS-H	AC PLUG ADAPTOR
A1 (EK)	SQF13361	INSTRUCTION BOOK			
A1 (EF)	SQF13362	INSTRUCTION BOOK			

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